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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Patent Application of:)
Theodore D. Wugofski)
Examiner: Christopher Onuaku
Serial No.: 09/002,600)
Group Art Unit: 2615
Filed: January 5, 1998)
Docket: 450.224US1
For: SYSTEM AND METHOD)
FOR REMINDING USERS)
OF UPCOMING)
SCHEDULED)
RECORDINGS)

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APPELLANT'S BRIEF ON APPEAL

Box AF
Commissioner for Patents
Washington, D.C. 20231

Sir:

This brief is presented in support of the Notice of Appeal from the Final Rejection of claims 1, 2, 4-13, 15-17, 20, 21, 24 and 26 of the above identified application, as set forth in the Final Office Action mailed October 24, 2001. (The Notice was mailed March 20, 2002 and received by the PTO mail room on March 29, 2002.) Nineteen claims remain for consideration.

The Appeal Brief is filed in triplicate. Appellant authorizes the Examiner to charge the fee of \$320.00 as set forth in 37 C.F.R. § 1.17(c) to Deposit Account No. 50-0439. Appellant reserves the right to submit a request for an oral hearing at a later time.

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1. REAL PARTY IN INTEREST

The real party in interest of the above-captioned patent application, in addition to the above-named Applicant, is the assignee, Amiga Development LLC, by virtue of an Assignment recorded on January 5, 1998, at Reel 8993, Frame 0560.

2. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to appellant which will have a bearing on the Board's decision in the present appeal.

3. STATUS OF THE CLAIMS

Claims 1, 2, 4-13, 15-17, 20, 21, 24 and 26 are pending and are all finally rejected. These 22 claims are the subject of the present appeal. Appendix I includes a complete copy of the current state of the claims on appeal.

4. STATUS OF AMENDMENTS

An Amendment After Final was filed on January 24, 2002, and an Advisory Action was mailed on February 25, 2002, stating the amendment would be entered upon filing of a Notice of Appeal, Appeal Brief, and requisite fees. Accordingly, the claims, listed in Appendix I, reflect entry of this Amendment After final and all previous amendments.

5. SUMMARY OF THE INVENTION

Conventional VCRs and PC-TV systems allow users to schedule or program automatic recording of television programs, days, weeks, or months in advance of those programs being broadcast. This feature provides a wonderful convenience for users; however, it also creates a likelihood that users will forget about programmed recording instructions, which in turn can cause

problems for users. For example, a user may load a video cassette without enough "room" to record an entire program or even forget to load any cassette at all. In these cases, the system could be prevented from completing a programmed recording instruction.

To address this and other problems, various aspects of the present invention include methods, systems, and software for reminding users about scheduled or programmed recordings. For example, one method entails:

- programming a recording device, such as a VCR, to begin a data recording at a recording time;
- receiving user input at least partially determinative of a time to remind the user about the programmed recording; and
- outputting a recording reminder signal, such as a verbal or textual message, at a time based on the user input and before the recording device initiates automatic execution of the programmed data recording.

Some embodiments include information regarding the programmed data recording in the remind message and/or output the message to a pager or other network communications device.

Another aspect of the invention concerns handling of user inputs that define or partially define the timing of the recording reminder signals for separate scheduled or programmed recordings.

Specifically, one such method entails:

- receiving two or more user remind-time inputs, with each user input associated with at least one of the scheduled recordings and each user input non-determinative of a time for initiation of its scheduled recording and with at least two of the user remind-time inputs differing from each other; and
- defining two or more recording reminder times, with each of the recording reminder times associated with at least one of the scheduled recordings and based at least partially on the associated user remind-time input and with each of the recording

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reminder times preceding a respective time for initiation of its associated scheduled recording by amounts of time based on the respective remind-time inputs.

6. ISSUES PRESENTED FOR REVIEW

- A. Was it proper to maintain the rejection of claims 11, 13, 17, 21, and 24 under 35 USC §102?**
- B. Was it proper to reject claims 1, 2, 8-10, and 26 under 35 USC §103?**
- C. Was it proper to reject claims 4, 5, 12 under 35 USC §103?**
- D. Was it proper to reject claims 7, 16, and 20 under 35 USC §103?**

7. GROUPING OF CLAIMS

For purposes of this appeal, the claims stand or fall based on the following groups:

Group A, claims 11, 13, 17, 21, and 24;

Group B, claims 1-2, 8-10, 6, 15 and 26;

Group C, claims 4, 5, 12;

Group D, claim 7, 16, and 20.

8. ARGUMENT

A. Was it proper to maintain the rejection of claims 11, 13, 17, 21, and 24 under 35 USC §102?

The Examiner rejected claims 11, 13, 17, 21 and 24 under 35 USC §102(b) as anticipated by Young (U.S. 4,706,121).

With entry of the Amendment After Final, claims 11, 17, 21, and 24 each require “means for receiving user input regarding a recording reminder, with the user input being non-determinative of the recording time,” “receiving user input at least partially determinative of a recording reminder time for a scheduled automatic data recording and non-determinative of a time for initiating the scheduled data recording,” or “receiving two or more user remind-time inputs, with each user input associated with at least one of the scheduled recordings and each user input non-determinative of a time for initiation of an automatic recording.

In the Final Office Action, the Examiner stated that “Young fails to explicitly disclose the method of receiving user input at least partially determinative of a recording reminder time for the scheduled recording and non-determinative of the recording time.” Thus, the amended claims include at least one element that is absent from Young.

The relevant law, as recited at MPEP §2131, is that a “claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference...in as much detail as is contained in the ... claim.” Therefore, the absence of the recited act of “receiving user input at least partially determinative of a recording reminder time for the scheduled recording and non-determinative of the recording time” from Young, precludes it from anticipating claims 11, 13, 17, 21 and 24 under 35 USC §102.

Accordingly, applicant respectfully requests that the Board overturn the §102 rejections of these claims.

B. Was it proper to reject claims 1, 2, 8-10, and 26 under 35 USC §103?

The Examiner rejected claims 1-2, 8-10, and 26 under 35 USC § 103(a) as unpatentable over Young (U.S. 4,706,121) in view of Ellis. (U.S. 6,275,268). (As explained in the Advisory Action, the Final Office Action misstated that this rejection applied to claims 1, 2, 8-11, 13, 17, 21, 24, and 26.)

In making the rejection, the Examiner conceded that “Young fails to explicitly disclose the method of receiving user input at least partially determinative of a recording reminder time for a scheduled recording, with the user input being non-determinative of the recording time.” To fill this gap, the Examiner asserted that Ellis teaches a user-programmable feature for reminding viewers to view particularly program., and that “it would have been obvious ... to apply similar principle [to Young] to automatically remind a user ... to record a program ... since this would provide the desirable advantage of preventing the user from failing to record a program for which the user had previously set a reminder.”

In response, appellant submits 1) that even if the combination were permissible it fails to meet all the terms of the rejected claims, and 2) that the combination is impermissible for lack of sufficient motivation to combine.

First, even if the proposed combination of Young and Ellis were permissible, it would fail to meet the terms of the rejected claims, since Ellis reports a user input for an adjustable reminder for viewing programs, but not “receiving user input at least partially determinative of a recording reminder time for a scheduled recording, with the user input being non-determinative of the recording time.”

See, for example:

Column 4, lines 5-8:

"There also exists a need for such a system that will give a user the capability to set a programmable reminder for viewing a program scheduled to air at a future time."

Column 15, lines 17-57:

"If while viewing program schedule information for a future time in BROWSE mode the user depresses the ENTER key on the remote controller, the microcontroller 16 will instruct the VDG 23 to display a REMINDER overlay message 130 which, as shown in FIG. 13, is displayed as a second overlay 131 appearing above the BROWSE overlay 132. The REMINDER message 130 queries the user as to whether the system should remind the user, at a predetermined time before the start of the selected program, that he or she would like to view the selected program, as shown in FIG. 13. If the user responds affirmatively, the microcontroller 16 stores reminder data consisting of at least the channel, time and day of the selected program in a reminder buffer, which contains similar schedule information for all programs for which the user has set a reminder. At a pre-determined time before the selected program start time, for example, five minutes, the microcontroller 16 will retrieve schedule information, including title and service, based on the reminder data, and will instruct the VDG 23 to display a REMINDER overlay message 140 on the television receiver 27, as shown in FIG. 14, to remind the user that he or she previously set a reminder to watch the selected program. The REMINDER message 140 contains the channel, service and start time. It also displays the number of minutes before the time of airing of the particular show and updates the display every minute until the time of airing. The REMINDER message 140 also displays a "TUNE" inquiry, which asks the user if she would like to tune to the selected program. When the user sets multiple reminders, the reminder overlays are stacked, for example, in ascending order

according to the time each reminder is scheduled to be displayed, and the next reminder message will appear on the television receiver after the user takes appropriate action to remove the reminder message then being displayed. The REMINDER message (140 could also be adapted to allow the user to display or modify a list of all reminders previously set by the user. As with the overlay display time period in the FLIP mode, the user can modify the time period before a selected program that the REMINDER message appears by entering the Viewer Preference mode and revising the time entry. ”

Column 19, lines 6-14:

“If the user selects a particular Pay-Per-View event or service in this manner, the programming schedule system will next present to the user a Pay-Per-View ordering screen such as that shown in FIG. 23. The display includes a figure representing the cost of the event or service. The display also asks the user to choose from among a plurality of scheduled airing times 230A-230C, as well as whether the user would like to see a REMINDER message prior to the start of the Pay-Per-View event or service.

However, neither of these passages, nor any other that appellant found in Ellis meets the requirement of “receiving user input at least partially determinative of a recording reminder time for a scheduled recording, with the user input being non-determinative of the recording time.” (Emphasis added.) The fact is the relevant portion of Ellis only reports a reminder for viewing a program. There’s no evidence that the viewing reminder is applied to a scheduled or programmed recording, or that one without hindsight at the time of invention would have sought to extend Ellis’s viewing reminder to scheduled or programmed recordings. Thus, even if the Examiner’s motivation were valid, the proposed modification of Young to include Ellis’s viewing reminder would not meet all the requirements of the rejected claims.

The relevant law is that to establish a *prima facie* of obviousness under 35 USC §103, “the prior art reference (or references when combined) must teach or suggest all the claim limitations.” MPEP § 2142 (citing *In re Vaeck*, 947 F.2d, 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). Here, the proposed combination of Young and Ellis, even if permissible, fails to teach “receiving user input at least partially determinative of a recording reminder time for a scheduled recording, with the user input being non-determinative of the recording time.” Thus, the Final Office Action fails to set forth a *prima facie* case of obviousness of claims 1, 2, 8-11, 13, 17, 21, 24, and 26 under 35 USC §103.

Second, appellant submits that, at the time of the present invention, one of ordinary skill would not have modified Young “to automatically remind a user ... to record a program” as the Examiner proposes. One would not have modified Young as proposed, because Young already has a programmable recording feature for automatic scheduled recordings and a reminder system which sounds an alarm a fixed (unadjustable) time period prior to a scheduled program broadcast. See, for example:

Column 8, lines 15-19:

The CPU is connected to an alarm 156 by line 158 for indicating to a user a short time (e.g., five minutes) before a selected program is to be broadcast, that the TV receiver 126 should be turned on, if it is off, so that the selected program can be viewed.”

Column 8, line 66 - column 9, line 2:

“The CPU 178 is connected to alarm 217 by line 219 for providing an audible signal to a user shortly before broadcast of a selected program if the TV receiver 200 is turned off, as a signal to turn it on.”

Column 12, lines 17-24:

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“The stored program can be used to trigger an alarm or enable a VCR without user intervention. The PG mode may be used for unattended recording of a series of programs by only menu selection, without the user having to set the VCR with channel, time, date, or length of program.”

Column 15, lines 21- 27:

“This mode allows the user to create a weekly reminder calendar, typically for weekly series and special events of non-weekly programs. The reminder process will set an alarm if the TV is not on before a certain time before the start of the program. If the TV is not on when the program starts, the reminder process will turn on the VCR to start recording the program.”

Column 20, lines 50-53:

“If the TV 126 or 200 is not on at 502 [in Fig. 13], the alarm 156 or 217 will be sounded five minutes before the start of the scheduled program at 503. If the TV is still not on at 504, the programmable tuner 132 of FIG. 3 or 164 of FIG. 4 will be set to the scheduled program at 505.”

Claim 17:

“said data processor being configured to provide the actuating signal to said alarm unless the television receiver is operating when said data processor checks the television receiver for operation.”

Claim 38:

“determining whether the television receiver is operating prior to the time of a broadcast program selected by the process and providing an alarm signal to the user

unless the television receiver is operating when the television receiver is checked for operation.”

In light of at least these passages, one of ordinary skill would have understood that Young includes means for programming the VCR to automatically record, means for programming a reminder alarm to view a program, and means for automatically recording if a viewer fails to turn on a TV to view a program associated with the view reminder. Given this understanding, one of ordinary skill would have reasonably understood that Young doesn’t require modification “to remind users to record a program,” as the Examiner’s rejection proposes, since Young already includes means for programming the VCR to automatically record. Indeed, the point of programming a VCR to automatically record is to remove the need for a user to initiate the recording. Thus, there’s no need to remind the user “to record the program.” Therefore, one of ordinary skill would not have recognized a desirability of modifying Young in accord with the Examiner’s proposal to remind users to record. In fact, there’s nothing in either Young or Ellis that even acknowledges the recording media problem addressed by the present invention.

The relevant law, recited in part at MPEP §2143.01, is that to establish a *prima facie* case of obviousness under 35 USC §103, “there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.” The MPEP also restates this principle as “[the] prior art must suggest the desirability of the claimed invention. *Id.*

In this case, the proposed motivation “to automatically remind a user ... to record a program” fails to establish that any desirability of the claimed invention. Indeed, as outlined above, it appears that one of ordinary skill at the time of the invention would not have recognized it desirable to modify Young “to automatically remind a user ... to record a program” since Young already includes a record

programming feature, and the obvious point of such a feature is to obviate the need for the user to remember to initiate the recording.

Accordingly, appellant respectfully requests that Board overturn the §103 rejections based on Young and Ellis because 1) even if the combination were permissible it fails to meet all the terms of the rejected claims, and/or 2) the combination is impermissible for lack of sufficient motivation to combine.

C. Was it proper to reject claims 4, 5, and 12 under 35 USC §103?

The Examiner rejected claims 4 and 5 as unpatentable over Young in view of Ellis and Hoff (U.S. 5,467,197), and claim 12 as unpatentable over Young and Hoff. Specifically, in making the final rejection of these claims, the Examiner stated at pages 10 and 11:

Young and Ellis fail to explicitly disclose the method wherein the recording reminder signal comprises outputting a message to a network communication device associated with at least one user of the computerized system. Hoff teaches the method wherein outputting the "recording" reminder signal comprises outputting message to a network communication device associated with at least one user of the computerized system (see col. 10, line 29 to col. 11, line 48.) It would have been obvious to one of ordinary skill to further modify Young ... as taught by Hoff, which would increase the capability of Young thereby making Young more commercially attractive."

Respectfully, appellant submits 1) that even if the combinations of Young, Ellis, and Hoff and Young and Hoff were permissible, they fail to meet the requirement of outputting a message to a network communications device because Hoff fails to meet the requirement and 2) that the asserted motivation is insufficient to lead one of ordinary skill to make the proposed combinations.

First, Hoff, like Young and Ellis, fails to teach or suggest "outputting a [recording reminder] message to a network communication device associated with at least one user of the computerized system." Instead, Hoff reports methods concerning VCR clock synchronization, VCR recording of pager messages, and VCR programming via telephone. See, for example, Hoff's abstract and Figure 1.

The passage cited by the Examiner (col. 10, line 29 to col. 11, line 48) as filling the gaps in Young and Ellis reports transmission of personal pager messages to a VCR and recording of those messages by the VCR. There's no indication in the passage, nor any other that appellant found in Hoff, that these personal pager messages are reminder messages concerning scheduled or programmed VCR recordings. In fact, a computer search shows that there are no occurrences of the terms "remind" or "reminder" or "reminding" in the entire text of Hoff..

Moreover, there's no evidence that Hoff's VCR or VCR control even transmits any pager messages out to external recipients or devices. Indeed, the Hoff system appears to be one way in this respect. See, for example, Fig. 1 which suggests not only that box 42 has only an output to VCR 53, but also that it includes no transmitter or output path to antenna 44. See also, column 11, lines 43-46, which states: "it has been shown how one or more messages can be sent by means of a telephone 10 to instruct VCR point to point receiver 46 to record the personal messages onto video tape for later playback and review." Thus, the Examiner's reading of Hoff is inaccurate.

Therefore, even if it were permissible to combine Hoff with Young and/or Ellis, the resulting combination would not overcome the admitted failures of Young and Ellis to teach the requisite act of "outputting a [recording reminder] message to a network communication device associated with at least one user of the computerized system."

The relevant law is that to establish a *prima facie* of obviousness under 35 USC §103, "the prior art reference (or references when combined) must teach or suggest all the claim limitations." MPEP §

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2142 (citing *In re Vaeck*, 947 F.2d, 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). Here, the proposed combinations of Young, Ellis, and Hoff and Young and Hoff , even if permissible, fails to teach outputting the recording reminder signal by outputting a message to a network communication device associated with at least one user of the computerized system. Thus, the Final Office Action fails to set forth a *prima facie* case of obviousness of claims 4, 5, and 12 under 35 USC §103.

Second, the asserted motivation is insufficient to lead one of ordinary skill to make the proposed combination. The Action states (in the paragraph bridging pages 10 and 11) that “it would have been obvious to one of ordinary skill in the art to further modify Young ... to output messages to a network communication device, as taught by Hoff, which would increase the capability of Young thereby making Young more commercially attractive.” However, no teaching or suggestion is cited to support that Young would be more commercially attractive with the addition of Hoff.

The relevant law is that “the Examiner has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d (BNA) 1596, 1598 (Fed. Cir. 1988). In combining prior art references to construct a *prima facie* case, the Examiner must show some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art that would lead an individual to combine the relevant teaching of the references. *Id.* More recently in *In re Sang-Su Lee*, 277 F.3d 1338; 61 USPQ2D (BNA) 1430 (Fed. Cir. 2002), the Federal Circuit spoke again on combining and modifying references to support an obviousness inquiry, declaring that

“The factual inquiry whether to combine references must be thorough and searching.... It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with. ... Our case law makes clear that the best defense against the

subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references....

[Moreover, the] need for specificity pervades this authority. ... [T]he examiner can satisfy the burden of showing obviousness of the combination only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." (Citations and internal quotations omitted.)

In view of this well-established law, appellant submits that the asserted motivation of combining for the sake of "commercial attractiveness" is unsubstantiated in the present record. Indeed, there's nothing in the record indicating that the outputting reminder messages through a network communications device is known to be "commercially attractive." Absent objective evidence in the record, "commercial attractiveness" appears to be an entirely subjective motivation, not an objective motivation founded in the references or knowledge in the art. As such, it fails to justify the asserted combination of Hoff with Young and Ellis and of Hoff with Young.

Accordingly, appellant respectfully requests that Board overturn the §103 rejections of claims 4, 5, and 12 based on Young and Ellis because 1) the proposed combinations of Young, Ellis, and Hoff fail to meet all the terms of the rejected claims, and/or 2) the proposed motivation of "commercial attractiveness" fails to objectively justify the proposed combinations.

Additionally, appellant renews its request, pursuant to 37 CFR §1.104(d)(2) and MPEP §2144.03, that the Examiner support the proposed motivation of "commercial attractiveness" with appropriate documentation, such as a suitable reference or personal affidavit.

D. Was it proper to reject claims 7, 16, and 20 under 35 USC §103?

Claim 7 was rejected as unpatentable over Young in view of Ellis and further in view of Strubbe. (U.S. 5,047,867), and claims 16 and 20 were rejected similarly over Young in view of Strubbe. However, in making the rejection at page 12 of the Final Office Action, the Examiner stated "Young and Ellis fails to explicitly disclose the method wherein outputting a reminder signal includes outputting a message concerning recording media, but which Strubbe teaches in col. 6, lines 25-49. The cited passages states:

As shown in FIG. 8a, the Future Program extended channel shows a menu page of the next, for example, 7 favorite and particular broadcast programs which are chronologically scheduled to be broadcast from the present time. As time progresses past the starting time of each of the programs, the menu page is updated to always include the next 7 programs. With regard to no. 4, it is noted that ABC News is scheduled to be recorded. The detailed menu page for this program (FIG. 8b) shows that this program is to be recorded if not watched and that there is sufficient room on the tape to accommodate the program. If there is insufficient room on the tape, an appropriate message will appear on the detailed menu page (FIG. 8c) and recording indication on the Future Program extended channel will be highlighted (FIG. 8d). It should be noted that the Change A button 52.2 toggles the recording request while the Change B button 52.3 toggles between whether a reminder is desired and which kind of audible/visual reminder is to be given, for example, five minutes before the starting time of the program. This reminder may be an audible signal, or a visual message (typically shown as a PIP display). At the appointed time, the PIP may then show the opening, for example, 10 seconds of the program.

However, even if Strubbe does disclose the output of a message concerning recording media, it does not overcome the shortcomings in Young and Ellis relative to the rejected claims.

In particular, Strubbe does not teach or suggest an act or means for receiving user input at least partially determinative of a recording reminder time for the scheduled data recording, with the user input being non-determinative of the recording time, as rejected claims 7, 16 and 20 require by virtue of their dependence on claims 1, 11, and 17.

Instead, Strubbe appears only to report options for a user to toggle a recording reminder function on or off and to select the type of reminder; it lacks an option to define, either in whole or in part, the timing of the reminder relative to a scheduled recording. More particularly, Strubbe explains, at column 6, lines 40-47 and with reference to Figs. 8b and 8d, that "the Change B button 52.3 toggles between whether a reminder is desired and which kind of audible/visual reminder is given, for example, five minutes, before the starting time of the program. This reminder may be an audible signal, or a visual message (typically shown as a PIP display)." Figs. 8b and 8d show the textual message "5 Minute Reminder Is Not Set" and associate the "Change B" button with the certain description "To adjust Type of Reminder," further confirming that Strubbe teaches only a user adjustment for the type of reminder, not a user input for adjusting the time of the reminder.

The relevant law is that to establish a *prima facie* of obviousness under 35 USC §103, "the prior art reference (or references when combined) must teach or suggest all the claim limitations." MPEP § 2142 (citing *In re Vaeck*, 947 F.2d, 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). Here, the proposed combinations of Young, Ellis, and Strubbe even if permissible, fail to teach "receiving user input at least partially determinative of a recording reminder time for a scheduled recording, with the user input being non-determinative of the recording time." Thus, the Final Office Action fails to set forth a *prima facie* case of obviousness of claims 7, 16, and 20 under 35 USC §103.

Accordingly, applicant respectfully requests that the Board overturn the §103 rejection of claims 7, 16, and 20.

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9. CONCLUSION

Appellant respectfully submits that the §102 and §103 rejections as set forth in the Final Office Action are improper based on deficiencies in the cited references and/or deficiencies as to the legal form as detailed above. Accordingly, appellant respectfully requests that the Board overturn the final §102 and §103 rejections of claims 1, 2, 4-13, 15-17, 20, 21, 24 and 26.

In the alternative to overturning the rejections of all the claims, appellant respectfully requests the Board not only to compel the production of supportive documentation for the proposed motivation of "commercial attractiveness" for claims 4, 5, and 12, but also to provide explicit guidance in amending one or more of the unallowed claims to an allowable form.

Respectfully submitted,

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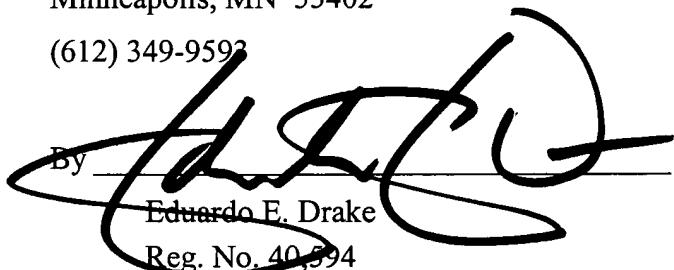
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20 Jan 2002

By

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: BOX AF, Commissioner of Patents, Washington, D.C. 20231, on this 20th day of June, 2002.

Candis B. Buending

Name

Signature



APPENDIX I

The Claims on Appeal

1. (Previously Once Amended) A method of operating a computerized system having a recording device for automatically recording data, the method comprising:
scheduling a data recording for the recording device, with the data recording to begin at a recording time;
receiving user input at least partially determinative of a recording reminder time for the scheduled data recording, with the user input being non-determinative of the recording time; and
outputting a recording reminder signal at a time based on the recording reminder time, before the recording device initiates automatic execution of the scheduled data recording.

2. The method of claim 1, wherein scheduling a data recording for the recording device occurs before receiving user input at least partially determinative of a recording reminder time.

4. The method of claim 1, wherein outputting the recording reminder signal comprises outputting a message to a network communications device associated with at least one user of the computerized system.

5. The method of claim 1, wherein outputting the reminder signal comprises outputting a message concerning the scheduled recording to a pager.

6. The method of claim 1 wherein outputting the reminder signal includes outputting a verbal message, a textual message, or an audible tone.

7. The method of claim 1, wherein outputting a reminder signal includes outputting a message concerning recording media.

8. The method of claim 1, wherein scheduling the data recording includes communicating a recording instruction to the computerized system, and wherein the method further comprises calculating and storing the recording reminder time based on at least the user input and at least a portion of the recording instruction before outputting the reminder signal.

9. The method of claim 8 wherein the recording instruction includes a channel identifier, a start time, and an end time.

10. The method of claim 1, wherein outputting a reminder signal at the predetermined time before the time of the data recording includes:

comparing a system time to the recording reminder time.

11. (Previously Once Amended) A computerized entertainment system comprising:

a receiver for receiving one or more channel signals, each carrying one or more programs;

a recording device, coupled to the receiver, for automatic recording one of the programs;

means for scheduling the recording device to begin automatic recording of the one program at a recording time;

means for receiving user input regarding a recording reminder, with the user input being non-determinative of the recording time;

means for determining a recording reminder time for at least the one program based on the recording time and the user input regarding the recording reminder;

an output device for outputting a reminder signal at the recording reminder time before the recording device initiates automatic recording of the one program; and means for causing the recording device to begin automatic recording of the one program independently of the determined recording reminder time.

12. The computerized entertainment system of claim 11, wherein the output device includes means for outputting the recording reminder signal as a message to a network communications device associated with at least one user of the computerized system.
13. The system of claim 11 wherein the output device comprises a computer and a display.
15. The system of claim 11 wherein the reminder signal includes a verbal message, a visible message, or an audible tone.
16. The system of claim 11 wherein the reminder signal includes a message concerning recording media.

17. (Previously Once Amended) A computer comprising reminder-generation software, the reminder-generation software comprising instructions for:

receiving user input at least partially determinative of a recording reminder time for a scheduled automatic data recording and non-determinative of a time for initiating the scheduled data recording, with the recording reminder time preceding a time of the scheduled automatic data recording by an amount of time based on the user input; and outputting a reminder signal at the recording reminder time before initiation of the scheduled automatic data recording.

20. The computer of claim 17, wherein the reminder-generation software instructions include instructions for including a message concerning recording media as part of the reminder signal.

21. (Previously Once Amended) A computer-readable medium comprising instructions for:
scheduling a read-write data storage device to automatically record data at a future time; and
receiving user input at least partially determinative of a recording reminder time and non-determinative of a time for initiation of the automatic recording, with the recording reminder time preceding the future time by an amount of time based on the user input;
and
outputting a recording reminder signal at the recording reminder time before the read-write data storage initiates automatic recording of the data.

24. (Previously Once Amended) A method of operating a computerized system having a recording device for automatically recording data during two or more scheduled recordings, the method comprising:
receiving two or more user remind-time inputs, with each user input associated with at least one of the scheduled recordings and each user input non-determinative of a time for initiation of an automatic recording and with at least two of the user remind-time inputs differing from each other; and
defining two or more recording reminder times, with each of the recording reminder times associated with at least one of the scheduled recordings and based at least partially on

the associated user remind-time input and with each of the recording reminder times preceding a respective time for initiation of its associated scheduled recording by amounts of time based on the respective remind-time inputs.

26. The method of claim 1, further comprising:

determining the recording reminder time based on the received user input, with the recording reminder time preceding the recording time for the scheduled recording by an amount of time based on the received user input.

APPELLANT'S BRIEF ON APPEAL

Serial No. 09/002,600

Filed: January 5, 1998

Title: SYSTEM AND METHOD FOR REMINDING USERS OF UPCOMING SCHEDULED RECORDINGS

Page 26

Atty. Docket No. 450.224US1

APPENDIX II

Office Actions and Amendments

1. Application filed January 5, 1998
2. First Office Action mailed August 17, 1999
3. Amendment And Response mailed November 17, 1999
4. Final Office Action mailed February 17, 2000
5. Response to Final Office Action mailed May 17, 2000
6. Advisory Action mailed June 2, 2000
7. Continued Prosecution Application and Preliminary Amendment mailed June 15, 2000
8. Office Action mailed September 12, 2000
9. Amendment and Response mailed February 12, 2001
10. Office Action mailed May 7, 2001
11. Amendment and Response mailed August 7, 2001
12. Final Office Action mailed October 24, 2001
13. Amendment and Response faxed to Examiner Onuaku January 24, 2002 (Formal)
14. Advisory Action mailed February 20, 2002
15. Notice of Appeal mailed March 20, 2002



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/002,600	01/05/1998	THEODORE D WUGOFSKI	450.224US1	7990

7590 02/20/2002

SCHWEGMAN LUNDBERG WOESSNER & KLUTH
P O BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER

ONUAKU, CHRISTOPHER O

ART UNIT PAPER NUMBER

2615

DATE MAILED: 02/20/2002

Q F.R. 5th Mo - Mar. 24, 2002

F.R. 6th Mo - Apr. 24, 2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Schwegman, Lundberg,
Woessner & Kluth, P.A.

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Woessner & Kluth, P.A.

Advisory ActionApplication No.
09/002,600

Applicant(s)

Wugofski

Examiner

Christopher Onuaku

Art Unit

2615



— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

THE REPLY FILED Jan 24, 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

Therefore, further action by the applicant is required to avoid the abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

THE PERIOD FOR REPLY [check only a) or b])

a) The period for reply expires 3 months from the mailing date of the final rejection.

b) In view of the early submission of the proposed reply (within two months as set forth in MPEP § 706.07 (f)), the period for reply expires on the mailing date of this Advisory Action, OR continues to run from the mailing date of the final rejection, whichever is later. In no event, however, will the statutory period for the reply expire later than SIX MONTHS from the mailing date of the final rejection.

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. A Notice of Appeal was filed on _____ . Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. The proposed amendment(s) will be entered upon the timely submission of a Notice of Appeal and Appeal Brief with requisite fees.
3. The proposed amendment(s) will not be entered because:
 - (a) they raise new issues that would require further consideration and/or search. (See NOTE below);
 - (b) they raise the issue of new matter. (See NOTE below);
 - (c) they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) they present additional claims without cancelling a corresponding number of finally rejected claims.

NOTE: _____

4. Applicant's reply has overcome the following rejection(s):

5. Newly proposed or amended claim(s) _____ would be allowable if submitted in separate, timely filed amendment cancelling the non-allowable claim(s).
6. The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because:

7. The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
8. For purposes of Appeal, the status of the claim(s) is as follows (see attached written explanation, if any):
Claim(s) allowed: _____
Claim(s) objected to: 4-13, 15-17
Claim(s) rejected: 1, 2, 4-17, 20, 21, 24, and 26

9. The proposed drawing correction filed on _____ has has not been approved by the Examiner.
10. Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
11. Other: (See attached)


ANDREW B. CHRISTENSEN
PRIMARY EXAMINER

Art Unit: 2615

Response to Arguments

1. Applicant's arguments filed 1/24/02 have been fully considered but they are not persuasive.
2. Applicant argues that one of ordinary skill would not modify Young based on Ellis because Young already has a reminder system to turn the television on, if the television is not turned on, some time before the scheduled program time in order to record the scheduled program which the user had previously set to record remind in advance.

In the last office action, the examiner states that Young discloses the method of receiving user input at least partially determinative of a recording reminder time for the scheduled recording (see the discussions above). And, that Young fails to explicitly disclose the method of receiving user input at least partially determinative of a recording reminder time for the scheduled recording, with the user input being non-determinative of the recording time.

Ellis et al teach in Fig.1,13&14 an electronic program schedule system which provides a user with schedule information for broadcast or cablecast programs viewed by the user on a television receiver, wherein if while viewing program schedule information for a future time in BROWSE mode, the user depresses the ENTER key on the remote controller 31, the

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microcontroller 16 will instruct the video display generator (VDG) 23 to display a REMINDER overlay message 130 (see Fig.13) which queries the user as to whether the system should remind the user, at a predetermined time before the start of a scheduled program that the user would like to view the scheduled program. If the user responds affirmatively, the microcontroller 16 stores reminder data consisting of at least the channel, time and day of the selected program in a reminder buffer, which contains similar schedule information for all programs for which the user has set a reminder. At a predetermined time before the selected program start time, for example, five minutes, the microcontroller 16 will retrieve schedule information, including title and service, based on the reminder data, and will instruct the VDG 23 to display a REMINDER 140 on the television receiver 27 to remind the user that the user previously set a reminder to watch the selected program. The REMINDER message 140 contains the channel, service and start time. It also displays the number of minutes before the time of airing of the particular show and updates the display every minute until the time of airing (see microcontroller 16 and VDG 23 of Fig.1, and col.15, lines 17-57).

Automatic reminding the user of previously set reminder to view (or record) a selected program provides the desirable advantage of preventing the user from failing to view (or record) a program for which the viewer had previously set a reminder.

It would have been obvious to further modify Young by realizing Young with the means to automatically **remind the user of previously set reminder to view a program for which the viewer had previously set a reminder**, as taught by Ellis, since this provides the desirable

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advantage of preventing the user from failing to view a program for which the viewer had previously set a reminder.

Ellis teaches the principle of automatically reminding a viewer of a previously set reminder, for example, to view a program for which the viewer had previously set a reminder. It would have been obvious, therefore, to apply similar principle to automatically remind a user, of the modified Young system, of a previously set reminder, for example, to record a program for which the viewer had previously set a reminder, since this also would provide the desirable advantage of preventing the user from failing to record a program for which the user had previously set a reminder.

Here the examiner modifies Young with Ellis because Ellis teaches the principle of automatically reminding a user of a previously set reminder which Young fails to disclose. Young discloses the principle of advanced television program recording whereby a user sets a recorder to automatically record a television program which is scheduled to be shown some time in the future.

With Young modified with Ellis, Ellis could remind a user about a reminder that the user had set about a program scheduled to be shown some time in the future which the user may want to view. Furthermore, this Ellis reminder principle can be extended to include reminding a user about a reminder that the user had set about a program scheduled to be shown some time in the future which the user may want to record.

Art Unit: 2615

It is, therefore, clear that the reminder system of Young is not the same as the reminder system of Ellis. It is this different reminder system of Ellis that would be added to Young when Young is modified with Ellis.

3. Please note that claims 11,13,17,21&24 cited as being rejected by 103 rejection by applying Young and Ellis was a typographical error, which the examiner regrets. Claims 11,13,17,21&24 were clearly rejected under 102 rejection by applying Young (see pages 3-6 of last office action). Claims 11,13,17,21&24 were never rejected under 103 rejection by applying Young and Ellis.

The examiner rejects the applicant's request to withdraw the finality of the last office action. Therefore, the rejection is maintained.

Conclusion

4. Any inquiry concerning this communication or earlier communications from this examiner should be directed to Christopher Onuaku whose telephone number is (703) 308-7555. The examiner can normally be reached on Tuesday to Thursday from 7:30 am to 5:00 pm. The examiner can also be reached on alternate Monday.

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Andrew B. Christensen, can be reached on (703) 308-9644.

Any response to this action should be mailed to:

Art Unit: 2615

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Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry)

and (for informal or draft communications, please label "PROPOSED" or
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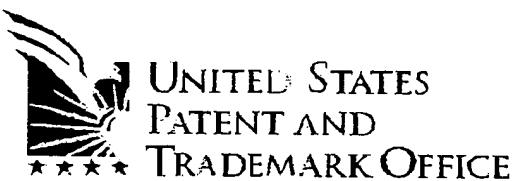
Any inquiry of a general nature or relating to the status of this application should be direct
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Serial No.: <u>09/002,600</u>		Group Art Unit: <u>2615</u>	
Filed: <u>January 5, 1996</u>		Docket No.: <u>450-224US1</u>	
Title: <u>SYSTEM AND METHOD FOR REMINDING USERS OF UPCOMING SCHEDULED RECORDINGS</u>			
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In re. Patent Application of: Theodore D. Wugofski

Examiner: Christopher Onuaku

Serial No.: 09/002,600

Group Art Unit: 2615

Filed: January 5, 1998

Docket No.: 450.224US1

Title: SYSTEM AND METHOD FOR REMINDING USERS OF UPCOMING SCHEDULED RECORDINGS

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In re. Patent Application of: Theodore D. Wugofski

Examiner: Christopher Onuaku

Serial No.: 09/002,600

Group Art Unit: 2615

Filed: January 5, 1998

Docket No.: 450.224US1

Title: SYSTEM AND METHOD FOR REMINDING USERS OF UPCOMING
SCHEDULED RECORDINGS

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EXPEDITED PROCEDURE - EXAMINING GROUP 2615

S/N 09/002,600

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Theodore D. Wugofski	Examiner:	Christopher Onuaku
Serial No.:	09/002,600	Group Art Unit:	2615
Filed:	January 5, 1998	Docket:	450.224US1
Title:	SYSTEM AND METHOD FOR REMINDING USERS OF UPCOMING SCHEDULED RECORDINGS		

AMENDMENT & RESPONSE UNDER 37 C.F.R. § 1.116

Box AF
Commissioner for Patents
Washington, D.C. 20231

In response to the final Office Action mailed October 24, 2001, please amend the application as follows:

IN THE CLAIMS

Please substitute the claim set in the appendix entitled Clean Version of Pending Claims for the previously pending claim set. The substitute claim set is intended to reflect amendment of claims 11, 17, 21, and 24. The specific amendments to individual claims are detailed in the following marked up set of claims.

1. (Previously Once Amended) A method of operating a computerized system having a recording device for automatically recording data, the method comprising:

scheduling a data recording for the recording device, with the data recording to begin at a recording time;

receiving user input at least partially determinative of a recording reminder time for the scheduled data recording, with the user input being non-determinative of the recording time; and

outputting a recording reminder signal at a time based on the recording reminder time, before the recording device initiates automatic execution of the scheduled data recording.

2. The method of claim 1, wherein scheduling a data recording for the recording device occurs before receiving user input at least partially determinative of a recording reminder time.
4. The method of claim 1, wherein outputting the recording reminder signal comprises outputting a message to a network communications device associated with at least one user of the computerized system.
5. The method of claim 1, wherein outputting the reminder signal comprises outputting a message concerning the scheduled recording to a pager.
6. The method of claim 1 wherein outputting the reminder signal includes outputting a verbal message, a textual message, or an audible tone.
7. The method of claim 1, wherein outputting a reminder signal includes outputting a message concerning recording media.
8. The method of claim 1, wherein scheduling the data recording includes communicating a recording instruction to the computerized system, and wherein the method further comprises calculating and storing the recording reminder time based on at least the user input and at least a portion of the recording instruction before outputting the reminder signal.
9. The method of claim 8 wherein the recording instruction includes a channel identifier, a start time, and an end time.
10. The method of claim 1, wherein outputting a reminder signal at the predetermined time before the time of the data recording includes:
 - comparing a system time to the recording reminder time.
11. (Amended) A computerized entertainment system comprising:

a receiver for receiving one or more channel signals, each carrying one or more programs; a recording device, coupled to the receiver, for automatic recording one of the programs; means for scheduling the recording device to begin automatic recording of the one program at a recording time; means for receiving user input regarding a recording reminder, with the user input being non-determinative of the recording time; means for determining a recording reminder time for at least the one program based on the recording time and the user input regarding the recording reminder; an output device for outputting a reminder signal at the recording reminder time before the recording device initiates automatic recording of the one program; and means for causing the recording device to begin automatic recording of the one program independently of the determined recording reminder time.

12. The computerized entertainment system of claim 11, wherein the output device includes means for outputting the recording reminder signal as a message to a network communications device associated with at least one user of the computerized system.

13. The system of claim 11 wherein the output device comprises a computer and a display.

15. The system of claim 11 wherein the reminder signal includes a verbal message, a visible message, or an audible tone.

16. The system of claim 11 wherein the reminder signal includes a message concerning recording media.

17. (Amended) A computer comprising reminder-generation software, the reminder-generation software comprising instructions for:
receiving user input at least partially determinative of a recording reminder time for a scheduled automatic data recording and non-determinative of a time for initiating

— the scheduled data recording, with the recording reminder time preceding a time of the scheduled automatic data recording by an amount of time based on the user input; and

outputting a reminder signal at the recording reminder time before initiation of the scheduled automatic data recording.

20. The computer of claim 17, wherein the reminder-generation software instructions include instructions for including a message concerning recording media as part of the reminder signal.

21. (Amended) A computer-readable medium comprising instructions for:
scheduling a read-write data storage device to automatically record data at a future time;
and
receiving user input at least partially determinative of a recording reminder time and non-determinative of a time for initiation of the automatic recording, with the recording reminder time preceding the future time by an amount of time based on the user input; and
outputting a recording reminder signal at the recording reminder time before the read-write data storage initiates automatic recording of the data.

24. (Amended) A method of operating a computerized system having a recording device for automatically recording data during two or more scheduled recordings, the method comprising:

receiving two or more user remind-time inputs, with each user input associated with at least one of the scheduled recordings and each user input non-determinative of a time for initiation of an automatic recording and with at least two of the user remind-time inputs differing from each other; and

defining two or more recording reminder times, with each of the recording reminder times associated with at least one of the scheduled recordings and based at least partially on the associated user remind-time input and with each of the recording

reminder times preceding a respective time for initiation of its associated scheduled recording by amounts of time based on the respective remind-time inputs.

26. The method of claim 1, further comprising:
determining the recording reminder time based on the received user input, with the recording reminder time preceding the recording time for the scheduled recording by an amount of time based on the received user input.

REMARKS

Claims 11, 17, 21 and 24 have been amended. No claims have been cancelled, and no claims have been added. As a result of the amendment, claims 1, 2, 4-13, 15-17, 20, 21, 24 and 26 are pending in this application.

Applicant reserves all applicable rights not exercised in connection with this response.

Response to §102 Rejections

Claims 11, 13, 17, 21 and 24 were rejected under 35 USC § 102(b) as anticipated by Young (U.S. 4,706,121).

In response, claim 11, 17, 21, and 24 have been amended to more readily distinguish over Young. Specifically, the claims were amended in accord with the Examiner's statement on page 7 of the Action that "Young fails to explicitly disclose the method of receiving user input at least partially determinative of a recording reminder time for the scheduled recording and non-determinative of the recording time." As a result each now requires "means for receiving user input regarding a recording reminder, with the user input being non-determinative of the recording time," "receiving user input at least partially determinative of a recording reminder time for a scheduled automatic data recording and non-determinative of a time for initiating the scheduled data recording," or "receiving two or more user remind-time inputs, with each user input associated with at least one of the scheduled recordings and each user input non-determinative of a time for initiation of an automatic recording." Thus, the amended claims distinguish from Young for the reasons expressly acknowledged by the Examiner.

Accordingly, applicant respectfully requests that the Examiner withdraw the §102 rejections.

Response to §103 Rejections based on Young & Ellis

Claims 1-2, 8-11, 13, 17, 21, 24 and 26 were rejected under 35 USC § 103(a) as unpatentable over Young (U.S. 4,706,121) in view of Ellis. (U.S. 6,275,268); claims 4-6 were rejected as unpatentable over Young in view of Ellis and Hoff (U.S. 5,467,197); and claim 7 was

rejected as unpatentable over Young (U.S. 4,706,121) in view of Ellis (U.S. 6,275,268) and further in view of Strubbe. (U.S. 5,047,867).

However, applicant traverses on the grounds that one of ordinary skill would not modify Young based on Ellis as proposed by the Examiner. In particular, Young already has a fixed reminder system which sounds an alarm a predetermined time period prior to a scheduled program or recording. See, for example, column 8, lines 15-19, which indicates that an alarm is sounded to remind a viewer to view a program and column 20, lines 50-53, which indicates sounding of the alarm prior to a recording. The Examiner proposes (at page 8 of the Action) that one would modify Young to include Ellis's remind feature to "provide the desirable advantage of preventing the user from failing to view (or record) a program." Yet, Young already provides this advantage. Thus, there's no motivation for one to modify Young pursuant to the proposed advantage.

MPEP 2143, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991), dictates that

[t]o establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the [cited] reference (or references when combined) must teach or suggest all the claim limitations.

Thus, without a valid motivation, the 103 rejection based on Young and Ellis fails to establish a prima facie case of obviousness.

Moreover, Ellis appears only to provide its reminder for viewing programs, not for viewing and reminding. The passage cited by the Examiner (col. 15, lines 17-57) doesn't indicate that the reminders are given for programs that are scheduled for recording. This is contrary to the Examiner's parenthetical suggestion that Ellis reminds users about scheduled recording sessions. The fact is Ellis fails to teach this precise form of user reminder. Thus, even if the Examiner's motivation were valid, the proposed modification of Young to include Ellis's viewing reminder would not meet all the requirements of the rejected claims.

Accordingly, applicant respectfully request that the 103 rejections based on Young and Ellis be withdrawn.

In further response to the rejection of claims 4-6 based on Young, Ellis, and Hoff, applicant submits that the Action fails to cite sufficient motivation for combining Hoff with Young and Ellis. The Action states (in the paragraph bridging pages 10 and 11) that “it would have been obvious to one of ordinary skill in the art to further modify Young ... to output messages to a network communication device, as taught by Hoff, which would increase the capability of Young thereby making Young more commercially attractive.” However, no teaching or suggestion is cited to support that Young would be more commercially attractive with the addition of Hoff. Moreover, MPEP 2144 states that an appropriate motivation may be reasoned from common knowledge in the art, scientific principles, art-recognized equivalents, or legal precedent. There is no mention of marketing principles or commercial attractiveness. Thus, the Action fails to establish a *prima facie* case of obviousness for claims 4-6.

Accordingly, applicant submits that there is additional grounds for withdrawing the 103 rejection of claims 4-6.

Response to §103 Rejections based on Young & Hoff and Young & Strubbe

Claims 12 and 15 were rejected under 35 USC § 103(a) as unpatentable over Young in view of Hoff, and claims 16 and 20 were rejected similarly over Young in view of Strubbe.

These rejections stand moot with the amendment of claim 11 to more readily distinguish from Young. Accordingly, applicant requests that the rejections of claims 12, 15, 16, and 20 also be withdrawn.

Request for Withdrawal of Finality

Pursuant to MPEP 706.07(a), applicant respectfully requests withdrawal of finality of the rejections based on Ellis, a newly cited reference, and the non-amendment of claims 2, 4-13, 15-17, 20, 21, 24, and 26 in the previous Amendment. MPEP 706.07(a) states that “a second or any subsequent action on the merits in any application ... will not be made final if it includes a rejection, on newly cited art, of any claim not amended by applicant or patent owner in spite of the fact that other claims may have been amended to require newly cited art.”

AMENDMENT & RESPONSE UNDER 37 C.F.R. § 1.116 - EXPEDITED PROCEDURE

Serial Number: 09/002,600

Filing Date: January 5, 1998

Title: SYSTEM AND METHOD FOR REMINDING USERS OF UPCOMING SCHEDULED RECORDINGS

Page 9

Dkt: 450-224 US1

Therefore, applicant submits that according to the MPEP, the present finality was improper and urges its withdrawal.

Conclusion

In view of the amended claims and foregoing remarks, applicant respectfully requests entry of the amendment, reconsideration of the application, and withdrawal of all rejections. Moreover, applicant invites the Examiner to call its patent counsel Eduardo Drake (612-349-9593) to address any issues that may impede allowance.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 50-0439.

Respectfully submitted,

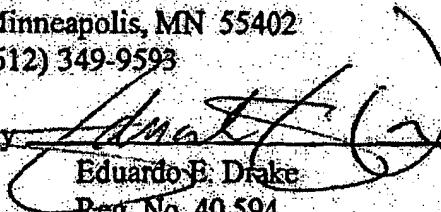
THEODORE D. WUGOFSKI

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(612) 349-9593

Date 24 Jan 2002

By


Eduardo E. Drake

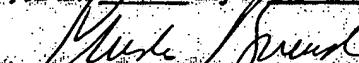
Reg. No. 40,594

The undersigned hereby certifies that this correspondence is being transmitted by facsimile (FAX NO. 703-872-9314) to: Box AF, Commissioner of Patents, Washington, D.C. 20231, on this 24th day of January, 2002.

Name

CANDIS BUNNIN

Signature



CLEAN VERSION OF PENDING CLAIMS

1. (Previously Once Amended) A method of operating a computerized system having a recording device for automatically recording data, the method comprising:
 - scheduling a data recording for the recording device, with the data recording to begin at a recording time;
 - receiving user input at least partially determinative of a recording reminder time for the scheduled data recording, with the user input being non-determinative of the recording time; and
 - outputting a recording reminder signal at a time based on the recording reminder time, before the recording device initiates automatic execution of the scheduled data recording.
2. The method of claim 1, wherein scheduling a data recording for the recording device occurs before receiving user input at least partially determinative of a recording reminder time.
4. The method of claim 1, wherein outputting the recording reminder signal comprises outputting a message to a network communications device associated with at least one user of the computerized system.
5. The method of claim 1, wherein outputting the reminder signal comprises outputting a message concerning the scheduled recording to a pager.
6. The method of claim 1 wherein outputting the reminder signal includes outputting a verbal message, a textual message, or an audible tone.
7. The method of claim 1, wherein outputting a reminder signal includes outputting a message concerning recording media.
8. The method of claim 1, wherein scheduling the data recording includes communicating a recording instruction to the computerized system, and wherein the method further comprises calculating and storing the recording reminder time based on at least the user input and at least a portion of the recording instruction before outputting the reminder signal.
9. The method of claim 8 wherein the recording instruction includes a channel identifier, a start time, and an end time.
10. The method of claim 1, wherein outputting a reminder signal at the predetermined time before the time of the data recording includes:
 - comparing a system time to the recording reminder time.
11. (Amended) A computerized entertainment system comprising:
 - a receiver for receiving one or more channel signals, each carrying one or more programs;

a recording device, coupled to the receiver, for automatic recording one of the programs; means for scheduling the recording device to begin automatic recording of the one program at a recording time; means for receiving user input regarding a recording reminder, with the user input being non-determinative of the recording time; means for determining a recording reminder time for at least the one program based on the recording time and the user input regarding the recording reminder; an output device for outputting a reminder signal at the recording reminder time before the recording device initiates automatic recording of the one program; and means for causing the recording device to begin automatic recording of the one program independently of the determined recording reminder time.

12. The computerized entertainment system of claim 11, wherein the output device includes means for outputting the recording reminder signal as a message to a network communications device associated with at least one user of the computerized system.

13. The system of claim 11 wherein the output device comprises a computer and a display.

15. The system of claim 11 wherein the reminder signal includes a verbal message, a visible message, or an audible tone.

16. The system of claim 11 wherein the reminder signal includes a message concerning recording media.

17. (Amended) A computer comprising reminder-generation software, the reminder-generation software comprising instructions for:

receiving user input at least partially determinative of a recording reminder time for a scheduled automatic data recording and non-determinative of a time for initiating the scheduled data recording, with the recording reminder time preceding a time of the scheduled automatic data recording by an amount of time based on the user input; and
outputting a reminder signal at the recording reminder time before initiation of the scheduled automatic data recording.

20. The computer of claim 17, wherein the reminder-generation software instructions include instructions for including a message concerning recording media as part of the reminder signal.

21. (Amended) A computer-readable medium comprising instructions for:
scheduling a read-write data storage device to automatically record data at a future time;
and
receiving user input at least partially determinative of a recording reminder time and non-determinative of a time for initiation of the automatic recording, with the recording reminder time preceding the future time by an amount of time based on the user input; and
outputting a recording reminder signal at the recording reminder time before the read-write data storage initiates automatic recording of the data.

24. (Amended) A method of operating a computerized system having a recording device for automatically recording data during two or more scheduled recordings, the method comprising:
receiving two or more user remind-time inputs, with each user input associated with at least one of the scheduled recordings and each user input non-determinative of a time for initiation of an automatic recording and with at least two of the user remind-time inputs differing from each other; and
defining two or more recording reminder times, with each of the recording reminder times associated with at least one of the scheduled recordings and based at least partially on the associated user remind-time input and with each of the recording reminder times preceding a respective time for initiation of its associated scheduled recording by amounts of time based on the respective remind-time inputs.

26. The method of claim 1, further comprising:
determining the recording reminder time based on the received user input, with the recording reminder time preceding the recording time for the scheduled recording by an amount of time based on the received user input.

**UNITED STATES DEPARTMENT OF COMMERCE****United States Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

CG

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY, DOCKET NO.
09/002,600	01/05/96	WLUJOFISKI	450.224US1

WM01/1024

SCHWEGMAN LUNDBERG WOESSNER & KLUTH
P O BOX 2938
MINNEAPOLIS MN 55402

 EXAMINER
ONUAKPIL

ART UNIT	PAPER NUMBER
	15

10/24/01

DATE MAILED:

12-24-01
1-24-02 DV
4-24-02

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

*Schwegman, Lundberg,
Woessner & Kluth, P.A.*
OCT 29 2001
RECEIVED

TR

Office Action Summary	Application No. 09/002,600	Applicant(s) Wugofski
	Examiner Christopher Onuaku	Art Unit 2615

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on Aug 13, 2001

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle* 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1, 2, 4-13, 15-17, 20, 21, 24, and 26 is/are pending in the applica

4a) Of the above, claim(s) _____ is/are withdrawn from considera

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1, 2, 4-13, 15-17, 20, 21, 24, and 26 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claims _____ are subject to restriction and/or election requirem

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are objected to by the Examiner.

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) All b) Some* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) Notice of References Cited (PTO-892)

18) Interview Summary (PTO-413) Paper No(s). _____

16) Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) Notice of Informal Patent Application (PTO-152)

17) Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

20) Other: _____

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-2,4-10&26 have been considered but are moot in view of the new ground(s) of rejection.

2. Applicant's arguments filed 8/13/01 with respect to claims 11-13,15-17, 20-21&24 have been fully considered but they are not persuasive.

With respect to claim 11, applicant argues that the only user input Young appears to use in determining its five-minute warning is the user input for scheduling a recording, that is, setting the recording time, and that there is no indication in Young that the time for issuing the five-minute warning is based on both a recording time and user input regarding a recording reminder. Examiner disagrees. Claim 11 as pointed out by the applicant cites a) means for scheduling the recording device to begin automatic recording of the one program at a recording time (see col.7, line 60 to col.8, line 3, wherein Young discloses program selection and scheduling; b) means for receiving user input regarding a recording reminder (see CPU 110 of Fig.3) and c) means for determining a recording reminder time for at least one program based on the recording time and the user input regarding the recording reminder. Young discloses in col.15, lines 20-27 that the default schedule mode, for example, allows a user to create a weekly reminder calendar (examiner

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considers creating a weekly reminder calendar, for example, as user input regarding recording reminder), wherein the reminder process will set an alarm if the TV is not ON before a certain time before the start of the program. The recording reminder time is clearly based on the recording time and the user input regarding recording reminder, since the user firstly creates a weekly reminder calendar, and based on that reminder calendar, an alarm is generated some time before the recording time.

Applicant's arguments with respect to claims 17,21&24 are similar to the applicant's arguments with respect to claim 11. Therefore, examiner's response to applicant's arguments with respect to claim 11 applies to the applicant's arguments with respect to claims 17, 21, and 24.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 11,13,17,21&24 are rejected under 35 U.S.C. 102(b) as being anticipated by Young et al (US 4,706,121).

Regarding claim 11, Young discloses in Fig.3, 4&4b an electronic system and process which receives the schedule information in broadcast form and then processes the schedule information to make the selections and a system that will enable a user to program a video

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cassette recorder (VCR) for unattended operation by making a simple selection from a menu, including computerized system (see col.21, line 65 to col.22, line 26), comprising:

- a) scheduling a data recording for the recording device, with the data recording to begin at a recording time (see Abstract and also col.7, line 60 to col.8, line 3);
- b) receiver for receiving one or more channel signals, each carrying one or more programs (see col.7, line 33 to col.8, line 22).
- c) a recording device, coupled to the receiver, for automatic recording one of the programs (see VCR 150; col.7, line 60 to col.8, line 22);
- d) means for receiving user input regarding a recording reminder time (see CPU 110; col.7, line 60 to col.8, line 22);
- e) means for determining a recording reminder time for at least the one program based on the recording time and the user input regarding the recording reminder (see col.15, lines 20-27);
- f) an outputting device for outputting a reminder signal at the recording reminder time before the recording device initiates automatic recording of the one program (see col.20, lines 40-65);
- g) means for causing the recording device to begin automatic recording of the one program independently of the determined recording reminder time (see col.20, lines 40-65).

Regarding claim 13, Young discloses wherein the output device comprises a computer and a display (see CPU 110 and video display generator 136; col.7, line 60 to col.8, line 22)

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Regarding claim 17, Young discloses in Fig.3,4&4b an electronic system and process which receives the schedule information in broadcast form and then processes the schedule information to make the selections and a system that will enable a user to program a video cassette recorder (VCR) for unattended operation by making a simple selection from a menu, including computerized system (see col.21, line 65 to col.22, line 26), the method comprising:

- a) receiving user input at least partially determinative of a recording reminder time for a scheduled automatic data recording, with the recording reminder time preceding a time of the scheduled automatic data recording by an amount of time based on the user input (see col.7, line 60 to col.8, line 3; col.15, lines 20-27; and col.20, lines 40-65), at the time the user sets a reminder determines how long the monitoring of the reminder process by the system lasts before recording begins. For example, assuming the reminder is set at 2:00 pm by a user input for a program scheduled to record at 10:00 pm, then the monitoring then lasts from 2:00 pm to 10:00 pm, and if, on the other hand, the reminder is set at 1:00 pm, by the user input, for a program scheduled to record at 8:00 pm, the monitoring lasts from 1:00 pm to 8:00 pm;
- b) outputting a recording reminder signal at a time based on the recording reminder time, before the recording device initiates automatic execution of the scheduled data recording (see col.20, lines 40-65).

Regarding claim 21, the claimed limitations of claim 21 are accommodated in the discussions of claim 17 above.

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Regarding claim 24, the claimed limitations of claim 24 are accommodated in the discussions of claim 11 above, including the additional limitation of receiving “two or more reminder-time inputs”(see at least col.7, line 60 to col.8, line 22); here the user can schedule for recording more than one desired program, with each of the desired programs having its own different reminder time since the selected programs may run at different times.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-2,8-11,13,17,21,24&26 rejected under 35 U.S.C. 103(a) as being unpatentable over Young (US 4,706,121) in view of Ellis et al (US 6,275,268).

Regarding claim 1, Young discloses in Fig.3,4&4b an electronic system and process which receives the schedule information in broadcast form and then processes the schedule information to make the selections and a system that will enable a user to program a video cassette recorder (VCR) for unattended operation by making a simple selection from a menu, including computerized system (see col.21, line 65 to col.22, line 26), the method comprising:

a) scheduling a data recording for the recording device, with the data recording to begin at a recording time (see Abstract and also col.7, line 60 to col.8, line);

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b) receiving user input at least partially determinative of a recording reminder time for the scheduled recording (see col.7, line 60 to col.8, line 3; col.15, lines 20-27);

c) outputting a recording reminder signal at a time based on the recording reminder time, before the recording device initiates automatic execution of the scheduled data recording (see col.20, lines 40-65).

Young discloses the method of receiving user input at least partially determinative of a recording reminder time for the scheduled recording (see the discussions above). Young fails to explicitly disclose the method of receiving user input at least partially determinative of a recording reminder time for the scheduled recording, with the user input being non-determinative of the recording time.

Ellis et al teach in Fig.1,13&14 an electronic program schedule system which provides a user with schedule information for broadcast or cablecast programs viewed by the user on a television receiver, wherein if while viewing program schedule information for a future time in BROWSE mode, the user depresses the ENTER key on the remote controller 31, the microcontroller 16 will instruct the video display generator (VDG) 23 to display a REMINDER overlay message 130 (see Fig.13) which queries the user as to whether the system should remind the user, at a predetermined time before the start of a scheduled program that the user would like to view the scheduled program. If the user responds affirmatively, the microcontroller 16 stores reminder data consisting of at least the channel, time and day of the selected program in a reminder buffer, which contains similar schedule information for all programs for which the user

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has set a reminder. At a predetermined time before the selected program start time, for example, five minutes, the microcontroller 16 will retrieve schedule information, including title and service, based on the reminder data, and will instruct the VDG 23 to display a REMINDER 140 on the television receiver 27 to remind the user that the user previously set a reminder to watch the selected program. The REMINDER message 140 contains the channel, service and start time. It also displays the number of minutes before the time of airing of the particular show and updates the display every minute until the time of airing (see microcontroller 16 and VDG 23 of Fig.1, and col.15, lines 17-57).

Automatic reminding the user of previously set reminder to view (or record) a selected program provides the desirable advantage of preventing the user from failing to view (or record) a program for which the viewer had previously set a reminder.

It would have been obvious to further modify Young by realizing Young with the means to automatically remind the user of previously set reminder to view a program for which the viewer had previously set a reminder, as taught by Ellis, since this provides the desirable advantage of preventing the user from failing to view a program for which the viewer had previously set a reminder.

Ellis teaches the principle of automatically reminding a viewer of a previously set reminder, for example, to view a program for which the viewer had previously set a reminder. It would have been obvious, therefore, to apply similar principle to automatically remind a user, of the modified Young system, of a previously set reminder, for example, to record a program for

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which the viewer had previously set a reminder, since this also would provide the desirable advantage of preventing the user from failing to record a program for which the user had previously set a reminder.

Regarding claim 2, Young discloses the method wherein scheduling a data recording for the recording device occurs before receiving input at least partially determinative of a recording reminder (see col.15, lines 20-27).

Regarding claim 8, Young discloses the method wherein scheduling the data recording includes communicating a recording instruction to the computerized system, and wherein the method further comprises calculating and storing the recording reminder time based on at least the user input and at least a portion of the recording instruction before outputting the "reminder" signal (see col.21, line 65 to col.22, line 26).

Regarding claim 9, Young discloses the method wherein the recording instruction includes a channel identifier, a start time, and an end time (see col.14, lines 9-15; col.14, lines 55-66).

Regarding claim 10, Young discloses wherein outputting a reminder signal at the predetermined time before the time of the data recording includes comparing a system time to the recording reminder time (see col.20, lines 40-65).

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Regarding claim 26, Young discloses determining the recording reminder time based on the received user input, with the recording reminder time preceding the recording time for the scheduled recording by an amount of time based on the received user input (see col.20, lines 40-65), at the time the user sets a reminder determines how long the monitoring of the reminder process by the system lasts before recording begins. For example, assuming the reminder is set at 2:00 pm by a user input for a program scheduled to record at 10:00 pm, then the monitoring then lasts from 2:00 pm to 10:00 pm, and if, on the other hand, the reminder is set at 1:00 pm, by the user input, for a program scheduled to record at 8:00 pm, the monitoring lasts from 1:00 pm to 8:00 pm.

7. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young in view of Ellis and further in view of Hoff (US 5,467,197).

Regarding claim 4, Young and Ellis fail to explicitly disclose the method wherein the recording reminder signal comprises outputting a message to a network communication device associated with at least one user of the computerized system. Hoff teaches the method wherein outputting the recording "reminder" signal comprises outputting message to a network communication device associated with at least one user of the computerized system (see col. 10, line 29 to col. 11, line 48). It would have been obvious to one of ordinary skill to further modify Young by realizing Young with the means to output reminder messages to a network

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communication device, as taught by Hoff, which would increase the capability of Young thereby making Young more commercially attractive.

Regarding claim 5, Young and Ellis fail to disclose wherein outputting the reminder signal comprises outputting a message concerning the scheduled recording to a pager. Hoff teaches the method wherein outputting the "reminder" signal comprises outputting a message concerning the scheduled recording to a pager (see col.3, lines 23-27, and col.5, lines 29-45).

It would have been obvious to one of ordinary skill in the art to further modify Young by realizing Young with the means to output reminder messages concerning the scheduled recording to a pager, as taught by Hoff, which would further increase the capability of Young, thereby making Young even more commercially attractive.

Regarding claim 6, Hoff teaches the method wherein outputting the reminder signal includes outputting a verbal message, a textual message, or an audible tone(see col.5, lines 29-45). It would have been obvious to further modify Young by realizing Young with the means wherein outputting the reminder signal includes outputting a verbal message, a textual message, or an audible tone in order to output reminder signals including a verbal message, a textual message, or an audible tone would make the reminder signal more quickly heard or observed, as the case may be.

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8. Claims 12&15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young in view of Hoff (US 5,467,197).

Regarding claim 12, the claimed limitations of claim 12 are accommodated in the discussions of claim 4 above.

Regarding claim 15, the claimed limitations of claim 15 are accommodated in the discussions of claim 6 above.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Young in view of Ellis and further in view of Strubbe et al (US 5,047,867).

Regarding claim 7, Young and Ellis fail to explicitly disclose the method wherein outputting a reminder signal includes outputting a message concerning recording media, but which Strubbe teaches in col.6, lines 25-49. Including a message concerning recording media in outputting a reminder signal makes eliminates, for example, the possibility of using a recording medium with insufficient recording room to record a scheduled program, thereby running the risk of losing some valuable part of a program to be recorded. It would have been obvious to one of ordinary skill in the art to add a message concerning recording media in the output reminder signal, as taught by Strubbe, since this would eliminates, for example, the possibility of using a recording medium with insufficient recording room to record a scheduled program, thereby running the risk of losing some valuable part of a program to be recorded.

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10. Claims 16&20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young in view of Strubbe et al (US 5,047,867).

Regarding claims 16&20, Young and Ellis fail to explicitly disclose the method wherein outputting a reminder signal includes outputting a message concerning recording media, but which Strubbe teaches in col.6, lines 25-49. Including a message concerning recording media in outputting a reminder signal makes eliminates, for example, the possibility of using a recording medium with insufficient recording room to record a scheduled program, thereby running the risk of losing some valuable part of a program to be recorded. It would have been obvious to one of ordinary skill in the art to add a message concerning recording media in the output reminder signal, as taught by Strubbe, since this would eliminates, for example, the possibility of using a recording medium with insufficient recording room to record a scheduled program, thereby running the risk of losing some valuable part of a program to be recorded.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

12. Any inquiry concerning this communication or earlier communications from this examiner should be directed to Christopher Onuaku whose telephone number is (703) 308-7555. The examiner can normally be reached on Tuesday to Thursday from 7:30 am to 5:00 pm. The examiner can also be reached on alternate Monday.

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Wendy Garber, can be reached on (703) 305-4929.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry)

and (for informal or draft communications, please label "PROPOSED" or "DRAFT")

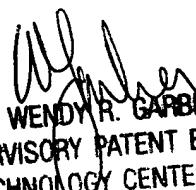
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Art Unit: 2615

Any inquiry of a general nature or relating to the status of this application should be directed to Customer Service whose telephone number is (703) 306-0377.

COO

10/10/01


WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Notice of References Cited		Applicant/Patent Wugofski	Application/Control No. 09/002,600
		Examiner Christopher Onuaku	Art Unit 2615

U.S. PATENT DOCUMENTS

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY ¹	Name	Classification ²	
A	6,275,268	8/01	Ellis et al	348	564
X	B 4,706,121	11/87	Young	386	83
X	C 5,467,197	11/95	Hoff	386	83
X	D 5,047,867	9/91	Strubbe et al	386	83
E					
F					
G					
H					
I					
J					
K					
L					
M					

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FOREIGN PATENT DOCUMENTS

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY ¹	Country	Name	Classification ²
N					
O					
P					
Q					
R					
S					
T					

NON-PATENT DOCUMENTS

*	Include, as applicable: Author, Title, Date, Publisher, Edition or Volume, Pertinent Pages		
U			
V			
W			
X			

¹A copy of this reference is not being furnished with this Office action. See MPEP § 707.05(a).

¹Dates in MM-YYYY format are publication dates.

²Classifications may be U.S. or foreign.

APPELLANT'S BRIEF ON APPEAL

Serial No. 09/002,600

Filed: January 5, 1998

Title: SYSTEM AND METHOD FOR REMINDING USERS OF UPCOMING SCHEDULED RECORDINGS

Page 27

Atty. Docket No. 450.224US1

APPENDIX III

Art of Record

U.S. Patent No. 4,706,121 (Young)

U.S. Patent No. 6,275,268 (Ellis)

U.S. Patent No. 5,467,197 (Hoff)

U.S. Patent No. 5,047,867 (Strubbe)

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APPENDIX IV

Cited Statutes, Rules, and Caselaw

I. Statutes and Rules

35 U.S.C. §102

35 U.S.C. §103

37 CFR §1.104(d)(2)

MPEP §2144.03

II. Caselaw

MPEP § 2142 (citing *In re Vaeck*, 947 F.2d, 488, 20 USPQ2d 1438 (Fed Cir. 1991)).

In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d (BNA) 1596, 1598 (Fed. Cir. 1998).

In re Sang-Su Lee, 277 F.3d, 1338; 61 USPQ2d (BNA) 1430 (Fed. Cir. 2002).

present. For these reasons, the court adopts the modified jurisdiction test.¹ [2] The court determines, without hesitation, that Turbo Tek has the continuous and systematic contacts with North Carolina necessary to support general jurisdiction and thus venue. In the last year, Turbo Tek has sold in North Carolina 30,570 of its pressure washers, 24,720 bottles of soft suds, 7,164 bottles of hard suds, 81,678 bottles of exploding wax, and 864 unspecified products. North Carolina accounts for 3.6% of Turbo Tek's total sales, yielding Turbo Tek over \$300,000.00 in the last year. Turbo Tek transports these goods directly from its facilities in California to its customers in North Carolina. In addition, Turbo Tek has a sales representative who permanently resides in North Carolina and solicits sales throughout the state. Turbo Tek's Vice

¹ The Fourth Circuit has not explicitly addressed the proper test for determining "doing business" venue. The two Fourth Circuit cases mentioning "doing business" venue have merely recited the contacts with the forum and then concluded that venue is proper. See *In Re Ralston Purina Co.*, 726 F.2d 1002, 1003 (4th Cir. 1984) (recites contacts and then merely states that "Purina 'is' doing business' under 28 U.S.C. §1339(c)"); *Du-Al Corp. v. Rudolph Beaver, Inc.*, 540 F.2d 1230, 1231, 1233 (4th Cir. 1976) (recites contacts then merely states that "collectively these activities constituted 'doing business'"). Arguably, by explaining that the contacts satisfied personal jurisdiction and then concluding that these same contacts amounted to "doing business", *Du-Al* equates venue and personal jurisdiction. A few cases have interpreted *Du-Al* as equating venue and personal jurisdiction. See, e.g., *Precision Rubber Products v. George McCarthy, Inc.*, 605 F.Supp. 473, 477 (M.D.Tenn. 1984); *Witzel v. Chartered Systems Corp.*, N.Y., 490 F.Supp. 343, 348 (D.Minn. 1980). See also Note 65 Tex.L.Rev. at n.57 and accompanying text (interprets *Du-Al* as equating venue and personal jurisdiction). Yet, a recent case states that *Du-Al* "might be said to have adopted this view [i.e., the jurisdiction test] . . . although less clearly . . . and with less discussion" . . . than the other cases adopting the view. " *Maybelline Co.*, 813 F.2d at 115 [2 USPQ2d at 1127 n.5] (emphasis added). Moreover, *Du-Al* was decided before the Supreme Court, in *Leroy*, expressed that venue statutes are designed to protect the defendant from an inconvenient forum. In sum, given the inexplicability of *Du-Al*, the conflicting interpretations of *Du-Al* by other courts, and the fact *Du-Al* was decided before *Leroy*, this court may appropriately attempt to refine the "doing business" standard in the this circuit. As such, the court herein adopts the modified jurisdiction test. The court notes, however, that venue is proper in the instant case under either the jurisdiction or the modified jurisdiction test.

President has, on at least one occasion, visited customers within North Carolina. Furthermore, Turbo Tek has run television advertisements on seventeen local television stations in North Carolina. Finally, Turbo Tek operates a mail order business, under the name Distribution Systems International, that has received and honored mail orders from North Carolinians. The court, accordingly, concludes that under the modified jurisdiction test Turbo Tek is "doing business" in North Carolina, thereby establishing venue under §1391(c).²

CONCLUSION

The court concludes that plaintiff complied with Fed.R.Civ.P. 4(c)(2)(C)(ii) in personally serving defendant, outside the forum state, with notice of this action. The court further concludes that defendant is "doing business" in North Carolina and thus venue is proper under 28 U.S.C. §1391(c). The court, accordingly, denies defendant's motion to dismiss.

Court of Appeals, Federal Circuit

In re Fine

No. 87-1319

Decided January 26, 1988

PATENTS

Appeal from the U.S. Patent and Trademark Office Board of Patent Appeals and Interferences. See, e.g., *Precision Rubber Products v. George McCarthy, Inc.*, 605 F.Supp. 473, 477 (M.D.Tenn. 1984); *Witzel v. Chartered Systems Corp.*, N.Y., 490 F.Supp. 343, 348 (D.Minn. 1980). See also Note 65 Tex.L.Rev. at n.57 and accompanying text (interprets *Du-Al* as equating venue and personal jurisdiction). Yet, a recent case states that *Du-Al* "might be said to have adopted this view [i.e., the jurisdiction test] . . . although less clearly . . . and with less discussion" . . . than the other cases adopting the view. " *Maybelline Co.*, 813 F.2d at 115 [2 USPQ2d at 1127 n.5] (emphasis added). Moreover, *Du-Al* was decided before the Supreme Court, in *Leroy*, expressed that venue statutes are designed to protect the defendant from an inconvenient forum. In sum, given the inexplicability of *Du-Al*, the conflicting interpretations of *Du-Al* by other courts, and the fact *Du-Al* was decided before *Leroy*, this court may appropriately attempt to refine the "doing business" standard in the this circuit. As such, the court herein adopts the modified jurisdiction test. The court notes, however, that venue is proper in the instant case under either the jurisdiction or the modified jurisdiction test.

² Because the court finds venue proper under §1391(c), it will not address whether the claims herein arose in North Carolina. See 28 U.S.C. §1391(b).

ally available knowledge that would lead one skilled in art to combine teachings of existing references.

2. Patentability/Validity — Obviousness — In general (§115.0901)

Obviousness is tested by what combined teachings of prior art references would have suggested to those of ordinary skill in art, not by whether particular combination of elements from such references might have been "obvious to try".

3. Patentability/Validity — Obviousness — Evidence of (§115.0903)

Patent and Trademark Office erred, in rejecting as obvious system for detecting and measuring minute quantities of nitrogen compounds, by failing to recognize that appealed claims can be distinguished over combination of prior art references, in view of evidence demonstrating that prior art does not teach claimed temperature range, despite some overlap of preferred temperature ranges for claimed invention and prior art, since purposes of preferred temperature ranges are different and overlap is mere happenstance.

4. Patentability/Validity — Obviousness — In general (§115.0901)

Dependent claims are non-obvious under 35 USC 103 if claims from which they depend are non-obvious.

The appealed claims were rejected by the Patent and Trademark Office (PTO) under 35 U.S.C. §103. Claims 60, 63, 77 and 80, were rejected as unpatentable over Eads, Patent No. 3,630,696 (Eads) in view of Warnick, et al., Patent No. 3,746,513 (Warnick). Claims 62, 68, 69, 79, 85 and 86 were rejected as unpatentable over Eads and Warnick in view of Glass, et al., Patent No. 3,207,585 (Glass).

The appealed claims were rejected by the Patent and Trademark Office (PTO) under 35 U.S.C. §103. Claims 60, 63, 77 and 80, were rejected as unpatentable over Eads, Patent No. 3,630,696 (Eads) in view of Warnick, et al., Patent No. 3,746,513 (Warnick). Claims 62, 68, 69, 79, 85 and 86 were rejected as unpatentable over Eads and Warnick in view of Glass, et al., Patent No. 3,207,585 (Glass).

B. The Prior Art.
1. Eads Patent.

Eads discloses a method for separating, identifying, and quantitatively monitoring sulfur compounds. The Eads system is used primarily in "air pollution control work in the scientific characterization of odors from sulfur compounds."

The problem addressed by Eads is the tendency of sulfur compounds "to adhere to or react with the surface materials of the sampling and analytical equipment, and/or react with the liquid or gaseous materials in the equipment." Because of this, the accura-

Mayer, J.

David H. Fine appeals from a decision of the Board of Patent Appeals and Interfer-

cy of measurement is impaired. To solve the problem, the Eads system collects an air sample containing sulfur compounds in a sulfur-free methanol solution. The liquid is inserted into a gas chromatograph which separates the various sulfur compounds. The compounds are next sent through a pyrolysis furnace where they are oxidized to form sulfur dioxide. Finally, the sulfur dioxide passes through a measuring device called a microcoulometer which uses titration cells to calculate the concentration of sulfur compounds in the sample.

2. Warnick Patent.
Warnick is directed to a means for detecting the quantity of pollutants in the atmosphere. By measuring the chemiluminescence of the reaction between nitric oxide and ozone, the Warnick device can detect the gaseous mixture.

Warnick calls for "continuously flowing" a sample gaseous mixture and a reactant containing ozone into a reaction chamber. The chemiluminescence from the resulting reaction is transmitted through a light-transmitting element to produce continuous readouts of the total amount of nitric oxide present in the sample.

3. Glass Patent.
The invention disclosed in Glass is a device for "completely burning a measured amount of a substance and analyzing the combustion products." A fixed amount of a liquid petroleum sample and oxygen are supplied to a flame. The flame is then spark-ignited, causing the sample to burn. The resulting combustion products are then collected and measured, and from this measurement the hydrogen concentration in the sample is computed.

C. The Rejection.
The Examiner rejected claims 60, 63, 77 and 80 because "substitution of the [nitric oxide] detector of Warnick for the sulfur detector of Eads would be an obvious consideration if interested in nitrogen compounds, and would yield the claimed invention." He further asserted that "Eads teaches the [claimed] combination of chromatograph, combustion, and detection, in that order.... Substitution of detectors to measure any component of interest is well within the skill of the art." In rejecting claims 62, 68, 69, 79, 85 and 86, the Examiner said, "Glass et al. teach a flame conversion means followed by a detector, and substitution of the flame conversion means of Glass et al. for the furnace of Eads would be an obvious equivalent, and would yield the gaseous mixtures claimed in the invention." The Board affirmed the Examiner's rejection.

A. Standard of Review.

Obviously under 35 U.S.C. §103 is "a legal conclusion based on factual evidence," *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871, 876 (Fed. Cir. 1983) (quoting *Stevenson Co. v. Roper Corp.*, 724 F.2d 951, 956, 220 USPQ 592, 596 (Fed. Cir. 1983); it is "reviewed for correctness or error as a matter of law," *In re De Blauwe*, 736 F.2d 699, 703, 222 USPQ 191, 195 (Fed. Cir. 1984).

To reach a proper conclusion under §103, the decisionmaker must step backward in time and into the shoes worn by [a person having ordinary skill in the art] when the invention was unknown and just before it was made. In light of *all* the evidence, the decisionmaker must then determine whether the claimed invention as a whole would have been obvious at *that* time to *that* person. 35 U.S.C. §103. The answer to that question partakes more of the nature of law than of fact, for it is an ultimate conclusion based on a foundation formed of all the probative facts.

Panduit Corp. v. Denison Mfg. Co., 810 F.2d 1561, 1566, 1 USPQ2d 1593, 1595-96 (Fed. Cir. 1987).

B. Prima Facie Obviousness.

Fine says the PTO has not established a *prima facie* case of obviousness. He contends the references applied by the Board and Examiner were improperly combined, using hindsight reconstruction, without evidence to support the combination and in the face of contrary teachings in the prior art. He argues that the appealed claims were rejected because the PTO thought it would have been "obvious to try" the claimed invention, an unacceptable basis for rejection.

[1] We agree. The PTO has the burden under section 103 to establish a *prima facie* case of obviousness. See *In re Piascetti*, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787 (Fed. Cir. 1984). It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. *In re Laiu*, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1984); see also *Ashland Oil, Inc. v. Delta Resins & Refineries, Inc.*

776 F.2d 281, 297 n.24, 227 USPQ 657, 667 n.24 (Fed. Cir. 1983); *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). This it has not done. The Board points to nothing in the cited references, either alone or in combination, suggesting or teaching Fine's invention.

The primary basis for the Board's affirmance of the Examiner's rejection was that it would have been obvious to substitute the Warnick nitric oxide detector for the Eads sulfur dioxide detector in the Eads system. The Board reiterated the Examiner's bald assertion that "substitution of one type of detector for another in the system of Eads" would have been within the skill of the art, but neither of them offered any support for or explanation of this conclusion.

Eads is limited to the analysis of sulfur compounds. The particular problem addressed there is the difficulty of obtaining precise measurements of sulfur compounds because of the tendency of sulfur dioxide to adhere to or react with the sampling analytic equipment or the liquid or gaseous materials in the equipment. It solves this problem by suggesting that the gaseous sample containing sulfur compounds be absorbed into sulfur-free methanol and then inserted into a gas chromatograph to separate the sulfur compounds.

There is no suggestion in Eads, which focuses on the unique difficulties inherent in the measurement of sulfur, to use that arrangement to detect nitrogen compounds. In fact, Eads says that the presence of nitrogen is undesirable because the concentration of the titration cell components in the sulfur detector is adversely affected by substantial amounts of nitrogen compounds in the sample. So, instead of suggesting that the system be used to detect nitrogen compounds, Eads deliberately seeks to avoid them. It warns against rather than teaches Fine's invention. See *W. L. Gore & Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 1550, 220 USPQ 303, 311 (Fed. Cir. 1983) (error to find obviousness where references "diverge from and teach away from the invention at hand"). In the face of this, one skilled in the art would not be expected to combine a nitrogen-related detector with the Eads system. Accordingly, there is no suggestion to combine Eads and Warnick.

Likewise, the teachings of Warnick are inconsistent with the claimed invention, to some extent. The Warnick claims are directed to a gas stream from engine exhaust "continuously flowing the gaseous mixtures into the reaction chamber" to obtain "con-

* The Solicitor argues that the contents of Attachment C of Fine's brief were not before the Board and may not properly be considered here. However, we need not rely on Attachment C. It is merely illustrative of the qualitative separation of nitrogen compounds which occurs in Fine's system. The fact that the various constituents exist at discrete intervals is shown by the specification which was before the Board and which may appropriately be considered on appeal. See, e.g., *Astur-Suco, A.B. v. United States Int'l Trade Comm'n*, 629 F.2d 682, 686, 207 USPQ 1, 5 (CCPA 1980) (claims must be construed in light of specification).

But this court has said, "To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." *W.L. Gore*, 721 F.2d at 1533, 220 USPQ at 312-13. It is essential that "the decisionmaker forget what he or she has been taught at trial about the claimed invention and cast the mind back to the time the invention was made . . . to occupy the mind of one skilled in the art who is presented only with the references, and who is normally guided by the then-accepted wisdom in the art." *Id.* One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

C. Advantage Not Appreciated by the Prior Art.

[3] The Board erred not only in improperly combining the Eads and Warnick references but also in failing to appreciate that the appealed claims can be distinguished over that combination. A material limitation of the claimed system is that the conversion to nitric oxide occur in the range of 600°C to 1700°C. The purpose of this limitation is to prevent nitrogen from other sources, such as the air, from being converted to nitric oxide and thereby distorting the measurement of nitric oxide derived from the nitrogen compounds of the sample.

The claimed nitric oxide conversion temperature is not disclosed in Warnick. Although Eads describes a preferred temperature of 675°C to 725°C, the purpose of this range is different from that of Fine. Eads requires the 675°C to 725°C range because it affords a temperature low enough to avoid formation of unwanted sulfur trioxide, yet high enough to avoid formation of unwanted sulfides. Fine's temperature range, in contrast, does not seek to avoid the formation of sulfur compounds or even nitrogen compounds. It enables the system to break down the nitrogen compounds of the sample while avoiding the destruction of background nitrogen gas. There is a partial overlap, of course, but this is mere happenstance. Because the purposes of the two temperature ranges are entirely unrelated, Eads does not teach use of the claimed range. See *In re Geiger*, 815 F.2d at 688, 2 USPQ2d at 1278. The Board erred by concluding otherwise.

D. Unexpected Results.

Because we reverse for failure to establish a *prima facie* case of obviousness, we need not reach Fine's contention that the Board

failed to accord proper weight to the objective evidence of unexpected superior results. *Id.*

E. The "Flame" Claims.

[4] Claims 62, 68, 69, 79, 85 and 86 relate to the oxygen-rich flame conversion means of the claimed invention. These "flame" claims depend from either apparatus claim 60 or method claim 77. Dependent claims are nonobvious under section 103 if the independent claims from which they depend are nonobvious. *Hartness Inv'l., Inc. v. Simplimatic Engg Co.*, 819 F.2d 1100, 1108, 2 USPQ2d 1826, 1831 (Fed. Cir. 1987); *In re Abele*, 684 F.2d 902, 910, 214 USPQ 682, 689 (CCPA 1982); see also *In re Sennaker*, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983). In view of our conclusion that claims 60 and 77 are nonobvious, the dependent "flame" claims are also patentable.

Conclusion

The Board's decision affirming the Examiner's rejection of claims 60, 62, 63, 68, 69, 77, 79, 80, 85 and 86 of Fine's application as unpatentable over the prior art under 35 U.S.C. §103 is *REVERSED*.

Smith, circuit judge, dissenting.

I respectfully dissent. I am of the firm belief that the prior art references, relied upon by the PTO to establish its *prima facie* case of obviousness, in combination teach and suggest Fine's invention to one skilled in the art. Also, I firmly believe that Fine failed to rebut the PTO's *prima facie* case. On this basis, I would affirm the board's determination sustaining the examiner's rejection, pursuant to 35 U.S.C. §103, of Fine's claims on appeal before this court.

The claimed nitric oxide conversion temperature is not disclosed in Warnick. Although Eads describes a preferred temperature of 675°C to 725°C, the purpose of this range is different from that of Fine. Eads requires the 675°C to 725°C range because it affords a temperature low enough to avoid formation of unwanted sulfur trioxide, yet high enough to avoid formation of unwanted sulfides. Fine's temperature range, in contrast, does not seek to avoid the formation of sulfur compounds or even nitrogen compounds. It enables the system to break down the nitrogen compounds of the sample while avoiding the destruction of background nitrogen gas. There is a partial overlap, of course, but this is mere happenstance. Because the purposes of the two temperature ranges are entirely unrelated, Eads does not teach use of the claimed range. See *In re Geiger*, 815 F.2d at 688, 2 USPQ2d at 1278. The Board erred by concluding otherwise.

D. Unexpected Results.

Because we reverse for failure to establish a *prima facie* case of obviousness, we need not reach Fine's contention that the Board

placed controlling reliance on defendant's representations to Patent and Trademark Office that defendant's claims and prior patent did not describe same or overlapping inventions, and thus court did not err in determining that plaintiff's device, which employs same circuitry as prior patent, does not infringe defendant's patent.

2. Patent construction — Patent Office proceedings — (§125.05)

JUDICIAL PRACTICE AND PROCEDURE

Procedure — Evidence — In general (§410.3701)

Federal district court, in deciding whether to declare interference under 35 USC 291, properly considered evidence demonstrating that defendant made no attempt to provoke interference during pendency of his applications and demonstrating that Patent and Trademark Office had not declared interference, and properly considered whether claims of respective patents "cross-read" on each other, and therefore court's conclusions that patents do not claim same subject matter and that interference should not be declared were not erroneous.

3. Procedure — Moot controversies (§410.12)

Appellate court's determination that patent was not infringed renders moot dispute as to patent's validity, and federal district court's holding that patent is therefore vacated.

REMEDIES

4. Monetary remedies — Attorney's fees; costs — Patents (§510.0905)

Federal district court erred by assessing attorney's fees against defendant in action seeking declaratory judgment of invalidity and non-infringement, since defendant was not shown to have acted in bad faith or fraudulently, since defendant litigated all pertinent issues, since defendant's position on merits was not totally without substance, and since defendant's patents were presumptively valid.

Particular patents — Electrical — Control circuits

Patent construction — Prosecution history estoppel (§125.09)

Federal district court, in action for declaration of non-infringement of patent, properly

3,876,956, Levinson, regulated power supply circuit for a heating magnetron, holding circuit for a heating magnetron, holding of non-infringement affirmed.

Appeal from the U.S. District Court for the Northern District of Illinois, McGarr, J.; 231 USPQ 1.

Action by Advance Transformer Co. against Melvin L. Levinson, seeking declaration of invalidity and non-infringement of patents, and counterclaim by Levinson for patent infringement and declaration of interference under 35 USC 291. From decision holding patents invalid and not infringing, refusing to declare interference, and awarding attorney's fees to plaintiff, defendant Levinson appeals. Holding of invalidity vacated, holding of non-infringement affirmed, and award of attorney's fees reversed.

James T. Williams and Neuman, Williams, Anderson & Olson (Theodore W. Anderson and Todd P. Blakely with them on the brief), Chicago, Ill., for plaintiff-appellee.

Harry B. Keck (Thomas H. Murray with him on the brief), Pittsburgh, Pa., for defendant-appellant.

Before Re, * chief judge, and Newman and Bissell, circuit judges.

Melvin L. Levinson appeals the judgment of the United States District Court for the Northern District of Illinois, which held invalid and not infringed his United States Patents Nos. 3,876,956 and 3,792,369, refused to declare an interference under 35 U.S.C. §291, and awarded attorney fees to declaratory plaintiff Advance Transformer Co.

We affirm the judgments of noninfringement of United States Patents Nos. 3,876,956 and No. 3,792,369, and vacate the judgments of invalidity with respect to both patent claims. The refusal to declare an interference is

* The Honorable Edward D. Re, Chief Judge, United States Court of International Trade, sitting by designation pursuant to 28 U.S.C. §283(a).
† *Advance Transformer Co. v. Levinson*, 231 USPQ 1 (N.D. Ill. 1986).

3,792,369, Levinson, variable reactance controls for AC powered heating magnetrons, holding of non-infringement vacated, holding of non-infringement affirmed.

3,792,369, Levinson, variable reactance controls for AC powered heating magnetrons, holding of non-infringement vacated, holding of non-infringement affirmed.

signs was not legally erroneous, and because we find that the Board's finding that Valu's guide rails are *de jure* functional is supported by substantial evidence, the Board's refusal to register Valu's guide rail designs is *affirmed*, and Rexnord's cross-appeal is dismissed as moot.

AFFIRMED**COSTS**

No costs.

[2] **Patentability/Validity — Obviousness**
— Combining references (§ 115.0905)
JUDICIAL PRACTICE AND PROCEDURE
Procedure — Judicial review — Standard of review — Patents (§ 410.4607.09)

Board of Patent Appeals and Interferences improperly relied upon "common knowledge and common sense" of person of ordinary skill in art to find invention of patent application obvious over combination of two prior art references, since factual question of motivation to select and combine references is material to patentability, and could not be resolved on subjective belief and unknown authority, since deferential review of agency decisions under Administrative Procedure Act reinforces obligation of board to develop evidentiary basis for its findings, since board's rejection of need for any specific hint or suggestion in particular reference to support combination constituted omission of relevant factor required by precedent, and thus was both legal error and arbitrary agency action, since board's findings must extend to all material facts and be documented on record, and since "common knowledge and common sense" are not specialized knowledge and expertise of agency contemplated by APA, and may not be substituted for evidence, although they may be applied to analysis of evidence.

In re Lee

[1] **Practice and procedure in Patent and Trademark Office — Board of Patent Appeals and Interferences — In general (§ 110.1101)**

Patentability/Validity — Obviousness — Combining references (§ 115.0905)

Patentability/Validity — Obviousness — Evidence of (§ 115.0906)

JUDICIAL PRACTICE AND PROCEDURE

[3] **Practice and procedure in Patent and Trademark Office — Board of Patent Appeals and Interferences — In general (§ 110.1101)**

Patentability/Validity — Obviousness — Evidence of (§ 115.0906)

Rejection of patent application for obviousness under 35 U.S.C. § 103 must be based on evidence comprehended by language of that section, and search for and analysis of prior art includes evidence relevant to finding of whether there is teaching, motivation, or suggestion to select and combine references relied on as evidence of obviousness; factual inquiry whether to combine references must be thorough and searching, based on objective evidence of record, and Board of Patent Appeals and Interferences must explain reasons why one of ordinary skill in art would have been motivated to select references and to combine them to render claimed invention obvious.

JUDICIAL PRACTICE AND PROCEDURE
Procedure — Judicial review — Standard of review — Patents (§ 410.4607.09)

Patent examiners and Board of Patent Appeals and Interferences, in relying on what they assert to be general knowledge to negate patentability on ground of obviousness, must articulate that knowledge and place it on record, since examiners and board are pre-

sumed to act from viewpoint of person of ordinary skill in art in finding relevant facts, assessing significance of prior art, and making ultimate determination of obviousness issue; failure to do so is not consistent with either effective administrative procedure or effective judicial review, and board cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth rationale on which it relies.

The Prosecution Record

Mr. Lee's patent application is directed to a method of automatically displaying the functions of a video display device and demonstrating how to select and adjust the functions in order to facilitate response by the user. The display and demonstration are achieved using computer-managed electronics, including pulse-width modulation and auto-fine-tuning pulses, in accordance with procedures described in the specification. Claim 10 is representative:

10. A method for automatically displaying functions of a video display device, comprising: determining if a demonstration mode is selected; if said demonstration mode is selected, automatically entering a picture adjustment mode having a picture menu screen displaying a list of a plurality of picture functions; and

automatically demonstrating selection and adjustment of individual ones of said plurality of picture functions.

The examiner rejected the claims on the ground of obviousness, citing the combination of two references: United States Patent No. 4,626,892 to Nortrup, and the Thunderchopper Helicopter Operations Handbook for a video game. The Nortrup reference describes a television set having a menu display by which the user can adjust various picture and audio functions; however, the Nortrup display does not include a demonstration of how to adjust the functions. The Thunderchopper Handbook describes the Thunderchopper game's video display as having a "demonstration mode" showing how to play the game; however, the Thunderchopper Handbook makes no mention of the adjustment of picture or audio functions. The examiner held that it

¹ *Ex parte Lee*, No. 1994-1989 (Bd. Pat. App. & Int. Aug. 30, 1994; on reconstr'n Sept. 29, 1999).

Sang-Su Lee appeals the decision of the Board of Patent Appeals and Interferences of

would have been obvious to a person of ordinary skill to combine the teachings of these references to produce the Lee system. Lee appealed to the Board, arguing that the Thunderchopper Handbook simply explained how to play the Thunderchopper game, and that the prior art provided no teaching or motivation or suggestion to combine this reference with Nortrup, or that such combination would produce the Lee invention. The Board held that it was not necessary to present a source of a teaching, suggestion, or motivation to combine these references or their teachings. The Board stated:

The conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference. Board op. at 7. The Board did not explain the "common knowledge and common sense" on which it relied for its conclusion that "the combined teachings of Nortrup and Thunderchopper would have suggested the claimed invention to those of ordinary skill in the art."

Lee filed a request for reconsideration, to which the Board responded after five years. The Board reaffirmed its decision, stating that the Thunderchopper Handbook was "analogous art" because it was "from the same field of endeavor" as the Lee invention, and that the field of video games was "reasonably pertinent" to the problem of adjusting display functions because the Thunderchopper Handbook showed video demonstrations of the "features" of the game. On the matter of motivation to combine the Nortrup and Thunderchopper references, the Board stated that "we maintain the position that we stated in our prior decision" and that the Examiner's Answer provided "a well reasoned discussion of why there is sufficient motivation to combine the references." The Board did not state the Examiner's reasoning, and review of the Examiner's Answer reveals that the examiner merely stated that both the Nortrup function menu and the Thunderchopper demonstration mode are program features and that the Thunderchopper mode "is user-friendly" and its functions as a tutorial, and that it would have been obvious to combine them.

Lee had pressed the examiner during prosecution for some teaching, suggestion, or motivation in the prior art to select and combine

the references that were relied on to show obviousness. The Examiner's Answer before the Board, plus a Supplemental Answer, stated that the combination of Thunderchopper with Nortrup "would have been obvious to one of ordinary skill in the art since the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software," and that "another motivation would be that the automatic demonstration mode is user friendly and its functions as a tutorial." The Board examiner has provided a well reasoned discussion of these references and how the combination of these references meets the claim limitations." However, perhaps recognizing that the examiner had provided insufficient justification to support combining the Nortrup and Thunderchopper references, the Board held, as stated *supra*, that a "specific hint or suggestion" of motivation to combine was not required.

This appeal followed.

Judicial Review

Tribunals of the PTO are governed by the Administrative Procedure Act, and their rulings receive the same judicial deference as do tribunals of other administrative agencies. *Dickinson v. Zurko*, 527 U.S. 150, 50 USPQ2d 1930 (1999). Thus on appeal we review a PTO Board's findings and conclusions in accordance with the following criteria:

5 U.S.C. § 706(2) The reviewing court shall—

- (2) hold unlawful and set aside agency actions, findings, and conclusions found to be—

(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;

* * * *

(E) unsupported by substantial evidence in a case subject to sections 556 and 557 of this title or otherwise reviewed on the record of an agency hearing provided by statute;

For judicial review to be meaningfully achieved within these strictures, the agency tribunal must present a full and reasoned explanation of its decision. The agency tribunal

must set forth its findings and the grounds thereof, as supported by the agency record, and explain its application of the law to the found facts. The Court has often explained:

The Administrative Procedure Act, which governs the proceedings of administrative agencies and related judicial review, establishes a scheme of "reasoned decisionmaking." Not only must an agency's decreed result be within the scope of its lawful authority, but the process by which it reaches that result must be logical and rational.

Allentown Mack Sales and Service, Inc. v. National Labor Relations Bd., 522 U.S. 359, 374 (1998) (citation omitted). This standard requires that the agency not only have reached a sound decision, but have articulated the reasons for that decision. The reviewing court is thus enabled to perform meaningful review within the strictures of the APA, for the court will have a basis on which to determine "whether the decision was based on the relevant factors and whether there has been a clear error of judgment." *Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402, 416 (1971). Judicial review of a Board decision denying an application for patent is thus founded on the obligation of the agency to make the necessary findings and to provide an administrative record showing the evidence on which the findings are based, accompanied by the agency's reasoning in reaching its conclusions. *See In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001) (review is on the administrative record); *In re Gartside*, 203 F.3d 1305, 1314, 53 USPQ2d 1769, 1774 (Fed. Cir. 2000) (Board decision "must be justified within the four corners of the record").

[1] As applied to the determination of patentability *vel non* when the issue is obviousness, "it is fundamental that rejections under 35 U.S.C. § 103 must be based on evidence comprehended by the language of that section." *In re Grasselli*, 713 F.2d 731, 739, 218 USPQ 769, 775 (Fed. Cir. 1983). The essential factual evidence on the issue of obviousness is set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966) and extensive ensuing precedent. The patent examination process centers on prior art and the analysis thereof. When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a

teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. See, e.g., *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001) ("the central question is whether there is reason to combine [the] references," a question of fact drawing on the *Graham* factors).

"The factual inquiry whether to combine references must be thorough and searching." *Id.* It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with. See, e.g., *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1121, 1124-25, 56 USPQ2d 1456, 1459 (Fed. Cir. 2000) ("a showing of a suggestion, teaching, or motivation to combine the prior art references is an 'essential component of an obviousness holding'") (quoting *C.R. Bard, Inc. v. M3 Systems, Inc.*, 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998); *In re Dembiczaik*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) ("Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references."); *In re Dance*, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998) (there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant); *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988) ("teachings of references can be combined only if there is some suggestion or incentive to do so.") (emphasis in original) (quoting *ACS Hosp. Sys. Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984)).

The need for specificity pervades this authority. See, e.g., *In re Koizab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) ("particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed"); *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998) ("even when the level of skill in the art is high, the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combina-

tion. In other words, the Board must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious."); *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (the examiner can satisfy the burden of showing obviousness of the combination "only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references").

[2] With respect to Lee's application, neither the examiner nor the Board adequately supported the selection and combination of the Nortrup and Thunderhopper references to render obvious that which Lee described. The examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority. It is improper in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." *WL Gore v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983). Thus the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion.

Deferential judicial review under the Administrative Procedure Act does not relieve the agency of its obligation to develop an evidentiary basis for its findings. To the contrary, the Administrative Procedure Act reinforces this obligation. *See, e.g., Major Vehicle Manufacturers Ass'n v. State Farm Mutual Automobile Ins. Co.*, 463 U.S. 29, 43 (1983) ("the agency must examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'") (quoting *Burlington Truck Lines v. United*

States, 371 U.S. 156, 168 (1962); *Securities & Exchange Comm'n v. Chenery Corp.*, 318 U.S. 80, 94 (1943) ("The orderly function of the process of review requires that the grounds upon which the administrative agency acted are clearly disclosed and adequately sustained.").

In its decision on Lee's patent application, the Board rejected the need for "any specific hint or suggestion in a particular reference" to support the combination of the Nortrup and Thunderhopper references. Omission of a relevant factor required by precedent is both legal error and arbitrary agency action. *See Major Vehicle Manufacturers*, 463 U.S. at 43 ("an agency rule would be arbitrary and capricious if the agency . . . entirely failed to consider an important aspect of the problem"); *Mullins v. Department of Energy*, 50 F.3d 990, 992 (Fed. Cir. 1995) ("It is well established that agencies have a duty to provide reviewing courts with a sufficient explanation for their decisions so that those decisions may be judged against the relevant statutory standards, and that failure to provide such an explanation is grounds for striking down the action."). As discussed in *National Labor Relations Bd. v. Ashkenazy Property Mgt. Corp.*, 817 F.2d 74, 75 (9th Cir. 1987), an agency is "not free to refuse to follow circuit precedent."

The foundation of the principle of judicial deference to the rulings of agency tribunals is that the tribunal has specialized knowledge and expertise, such that when reasoned findings are made, a reviewing court may confidently defer to the agency's application of its knowledge in its area of expertise. Reasoned findings are critical to the performance of agency functions and judicial reliance on agency competence. *See Baltimore and Ohio R. Co. v. Aberdeen & Rockfish R. Co.*, 393 U.S. 87, 91-92 (1968) (absent reasoned findings based on substantial evidence, effective review would become lost "in the haze of so-called expertise"). The "common knowledge and common sense" on which the Board relied in rejecting Lee's application are not the specialized knowledge and expertise contemplated by the Administrative Procedure Act. Conclusory statements such as those here provided do not fulfill the agency's obligation. This court explained in *Zurko*, 258 F.3d at 1385, 59 USPQ2d at 1697, that "deficiencies of the cited references cannot be remedied by

the Board's general conclusions about what is 'basic knowledge' or 'common sense.' " The Board's findings must extend to all material facts and must be documented on the record, lest the "haze of so-called expertise" acquire insulation from accountability. "Common knowledge and common sense," even if assumed to derive from the agency's expertise, do not substitute for authority when the law requires authority. *See Allentown Mack*, 522 U.S. at 376 ("Because reasoned decisionmaking demands it, and because the systemic consequences of any other approach are unacceptable, the Board must be required to apply in fact the clearly understood legal standards that it enunciates in principle")

The case on which the Board relies for its departure from precedent, *In re Bozek*, 416 F.2d 1385, 163 USPQ 545 (CCPA 1969), indeed mentions "common knowledge and common sense," the CCPA stating that the phrase was used by the Solicitor to support the Board's conclusion of obviousness based on evidence in the prior art. *Bozek* did not hold that common knowledge and common sense are a substitute for evidence, but only that they may be applied to analysis of the evidence. *Bozek* did not hold that objective analysis, proper authority, and reasoned findings can be omitted from Board decisions. Nor does *Bozek*, after thirty-two years of isolation, outweigh the dozens of rulings of the Federal Circuit and the Court of Customs and Patent Appeals that determination of patentability must be based on evidence. This court has remarked, in *Smiths Industries Medical Systems, Inc. v. Vital Signs, Inc.*, 183 F.3d 1347, 1356, 51 USPQ2d 1415, 1421 (Fed. Cir. 1999), that *Bozek's* reference to common knowledge "does not in and of itself make it so" absent evidence of such knowledge.

[3] The determination of patentability on the ground of unobviousness is ultimately one of judgment. In furtherance of the judgmental process, the patent examination procedure serves both to find, and to place on the official record, that which has been considered with respect to patentability. The patent examiner and the Board are deemed to have experience in the field of the invention; however, this experience, insofar as applied to the determination of patentability, must be applied from the viewpoint of "the person having ordinary skill in the art to which said subject matter pertains," the words of section 103. In finding the

relevant facts, in assessing the significance of the prior art, and in making the ultimate determination of the issue of obviousness, the examiner and the Board are presumed to act from this viewpoint. Thus when they rely on what they assert to be general knowledge to negate patentability, that knowledge must be articulated and placed on the record. The failure to do so is not consistent with either effective administrative procedure or effective judicial review. The board cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies.

Alternative Grounds

[4] At oral argument the PTO Solicitor proposed alternative grounds on which this court might affirm the Board's decision. However, as stated in *Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168 (1962), "courts may not accept appellate counsel's *post hoc* rationalization for agency action." Consideration by the appellate tribunal of new agency justifications deprives the aggrieved party of a fair opportunity to support its position; thus review of an administrative decision must be made on the grounds relied on by the agency. "If those grounds are inadequate or improper, the court is powerless to affirm the administrative action by substituting what it considers to be a more adequate or proper basis." *Securities & Exchange Comm'n v. Chenery Corp.*, 332 U.S. 194, 196 (1947). As reiterated in *Federal Election Comm'n v. Akin*, 524 U.S. 11, 25 (1998), "If a reviewing court agrees that the agency misinterpreted the law, it will set aside the agency's action and remand the case — even though the agency (like a new jury after a mistrial) might later, in the exercise of its lawful discretion, reach the same result for a different reason." Thus we decline to consider alternative grounds that might support the Board's decision.

Further Proceedings

Sound administrative procedure requires that the agency apply the law in accordance with statute and precedent. The agency tribunal must make findings of relevant facts, and present its reasoning in sufficient detail that the court may conduct meaningful review of the agency action. In *Radio-Television News Directors Ass'n v. FCC*, 184 F.3d 872 (D.C.

